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ABSTRACT

Introduced by a look at the general problem of reading difficulties, the text discusses the roles of the principal, teacher, specialist, and administrator in treating the problem. The principal's responsibility, identification, home and family influence, environmental improvement, evaluating reading skills, leadership, and case studies of successful programs are described. Also examined are primary learning difficulties and current approaches to the problem, establishing a clinic program, University Reading Clinics, and a sample book list for a reading clinic. Classroom techniques are suggested for diagnosing reading problems, correction in groups and individually, and correction of specific problems found by diagnosis. The role of the specialist is also established for the diagnosis and treatment of reading problems. Methods of handling reading disability within a school are presented, and procedures are illustrated for establishing a program and correcting specific reading skills. (JM)

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TREATING READING DIFFICULTIES

The Role of the
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Teacher
Specialist
Administrator

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TREATING READING DIFFICULTIES

The Role of the Principal Teacher Specialist Administrator

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U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
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INTRODUCTION

A LOOK AT THE PROBLEM

John Steinbeck has said, "Learning to read is the most difficult and revolutionary thing that happens to the human brain."

Despite the difficulty of the task, most adults who went through the public school system 20 or 25 years ago did learn to read. They are baffled by today's news that a large proportion of children are not learning to read at all or are acquiring only limited ability in reading.

The full extent of the problem is not known. What evidence there is, however, seems to indicate that reading disability affects a surprisingly large proportion of the school population. This conclusion was arrived at through various research efforts:

- Recent achievement tests given to New York City's 84,000 third graders show that 59.9 percent are reading below grade level. The Board of Education has termed reading deficiency the schools' "overriding problem."
- The ubiquitousness of remedial reading programs in every community across the Nation indicates that reading deficiencies exist among the rich and elite as well as the poor and disadvantaged.
- A study of 50,000 eighth graders showed only 14 percent with eighth-grade reading ability. Eight percent read at the fifth-grade level and 7 percent at the twelfth-grade level. The remainder was distributed between the two extremes. The range is typical and creates an enormous problem for teacher and student alike (Lazar, 1952; DeBoer article, p. 274).[1] The relatively simple questions of what level text materials to provide for such a range becomes nearly insoluble.
- Recently studies reveal that the number of boys who read either poorly or not at all exceeds that for girls, probably 10 to 1, but no teacher or textbook publisher has figured out a way to act on this information (DeBoer, 1958).
- Even though the problem is known to be extensive, it is possible to find school administrators who confess to no knowledge of its extent in their building or school systems.

[1] See references, pages 23 and 24.

The reasons for today's failures are many: more children in school, larger classrooms, more complex psychological problems, more distractions, less compulsion to learn, not enough money to provide the personnel, space, and materials to cope with all the other problems. Furthermore, when recalling the "good ole days," one is likely to forget that those who could not learn quietly dropped out of school, taking their problems and failures off the record.

The truth is that not a great deal is known about reading problems, why some children learn and others do not, what kind of training to give to those who teach reading, what materials best facilitate learning to read, what separate skills combine to turn an illiterate child into a discriminating reader. In the past 2 or 3 decades various disciplines have discovered more about the fundamentals of how to read than was known previously. In the past few years, with the infusion of funds to support experimentation and innovation, more new approaches have been tried than ever before. Since 1964 the Office of Education has funded 204 research projects on reading, totaling approximately $10 million. Progress towards a more fundamental understanding of reading itself is expected to result from the Office of Education's new Research Program on the Reading Process. (All documents generated in this program will be available through the ERIC (Educational Resources Information Center) system.)

COOPERATION NEEDED

No one person can solve all the reading problems in a school district, nor can any one type of activity satisfy all needs. Every school system has reading difficulties that vary from slight misunderstandings of rules to severe disabilities with accompanying psychological and social deviations. A comprehensive reading program, therefore, includes the diagnosis and treatment of reading problems at all levels, slight to severe—a program that ranges from correction by a classroom teacher to treatment by a clinician. Without that range of treatment some children are bound to suffer serious defeat in learning to read.

The classroom teacher, the reading specialist, and the administrator all provide necessary ingredients in a workable, comprehensive reading program. When one or more fails to contribute the part his role provides, he destroys a significant part of the

program. The classroom teacher provides the diagnostic and corrective treatment in the classroom, or refers the child to someone who can give the needed treatment. If the classroom teacher sees that the child needs additional diagnosis or treatment on an individual basis, he sends the child to a remedial reading teacher (reading specialist).

The reading specialist works with individuals or with small groups and provides specific and concentrated treatment as long as the child needs the help. Estimates place 10 to 25 percent of the school population in need of that kind of specific help in reading (Strang, 1968).[2] The specialist and the classroom teacher remain in constant touch about the individual child so they can work cooperatively in bringing him up to satisfactory performance in reading. Often a specialist will work only in one school building or share his time between two buildings.

It has been found that, when the remedial reading teacher divides his time among four or more schools, he does not have enough time or opportunity to keep in touch with the classroom teacher about the progress of students he is working with in his remedial classes. Thus, the classroom teacher cannot reinforce the activity that goes on in the remedial class—he may even counteract it; and the remedial teacher does not get feedback from the classroom teacher about important things like interests and attitudes observed while the remedial treatment is going on.

Should the remedial reading teacher who works within a school building find that working with reading skills and providing extra practice on an individual basis does not bring satisfactory results, he must refer the child to more specialized diagnosis. This kind of diagnosis usually takes place at a reading clinic or a learning disabilities clinic.

It is estimated that 1 to 5 percent of the school population need highly technical diagnosis and treatment for severe reading disabilities that may have their roots in emotional, social, or physical problems. This kind of clinical diagnosis and treatment needs the support of the central school administration. Funds, communications, support, and encouragement for a comprehensive program must come from the top-level administrator. Unless the top-level administrator, the principal, the reading specialist, and the classroom teacher see reading problems from various levels and work with one another in referrals, treatments, and evaluations, every child with a reading problem will not get the help he needs.

[2]See reference, p. 49.

A comprehensive attack on reading problems comes about through the cooperation of many people. Certainly it is possible for the classroom teacher to do a quick diagnosis of reading problems and engage in corrective activities in her classroom without having additional services available within a school district. But there will normally be several children in every classroom who need attention beyond what the classroom teacher can provide. Those services outside the classroom must be provided in a cooperative manner among the classroom teacher, the principal, the reading specialist, and the central administration. Even within the classroom the teacher will need financial support in order to have sufficient materials for the carrying on of a variety of diagnostic and corrective activities. This support evidently must come from school finances. Often the need for corrective activities is not easily detectable to the outsider, hence cooperative action becomes of even greater importance.

PREP MONOGRAPH

In an effort to make educators aware of what has been discovered and what is working elsewhere, the Office of Education, through its PREP (Putting Research into Educational Practice) program, has issued this monograph on reading difficulties and the cooperative efforts of various professionals to deal with the problems encountered.

The four target audiences to whom the monograph is directed and their areas of responsibility are: (1) the principal and the treatment of reading difficulty related to environmental factors; (2) the top-level administrator and the treatment of reading difficulty through a multiservice diagnostic center; (3) the teacher and the treatment of reading difficulty in the classroom; and (4) the reading specialist and the treatment of reading difficulty within a school building. The mongraph summarizes and interprets research and development findings, describes new and apparently successful programs, and makes recommendations for setting up similar programs.

The monograph was written by Dr. Carl B. Smith, Indiana University, in cooperation with Barbara Carter and Gloria Dapper in connection with an interpretive studies project supported by the Office of Education.

DEFINITION OF TERMS

A number of terms will be used throughout this publication in reference to the roles of various people

involved in the teaching of reading. The following definitions of roles[3] should serve as a guide to the particular duties of each:

A *reading specialist* is that person (1) who works directly or indirectly with those pupils who have either failed to benefit from regular classroom instruction in reading or those pupils who could benefit from advanced training in reading skills and/or (2) who works with teachers, administrators, and other professionals to improve and coordinate the total reading program of the school.

A *special teacher of reading* has major responsibility for remedial and corrective and/or developmental reading instruction.

A *reading clinician* provides diagnosis, remediation, or the planning of remediation for the more complex and severe reading disability cases.

A *reading consultant* works directly with teachers, administrators, and other professionals within a school to develop and implement the reading program under the direction of a supervisor with special training in reading.

A *reading supervisor (coordinator)* provides leadership in all phases of the reading program in a school system.

Developmental reading instruction is characterized by starting at the instructional level of a child, helping him proceed at his own rate, and following a sequential series of reading activities. This type of instruction is done in the classroom by the classroom teacher.

Remedial reading instruction includes the characteristics of developmental instruction but deals with children who read at 2 or more years below their capacity or grade level. This type of instruction is given by a remedial reading teacher outside the regular classroom setting, usually in a clinic or special classroom.

Corrective reading instruction, like remedial instruction, includes the characteristics of developmental instruction. It deals with children who read up to 2 years below capacity or grade level and is given by the classroom teacher in the regular classroom.

[3] Definitions and analyses of qualifications for each of the roles were developed by the Professional Standards and Ethics Committee of the International Reading Association, and are taken from the *Journal of Reading*, October 1968.

READING AND THE HOME ENVIRONMENT—THE PRINCIPAL'S RESPONSIBILITY

ENVIRONMENT AND THE PRINCIPAL

Just as there is mounting public concern today over the number of students who fail to learn to read adequately—estimates range to more than 50 percent in some places—so there is growing recognition that the schools must take the lead in overcoming the most pervasive causes of the difficulty—environmental factors (DeBoer, 1958, p. 276).[1] Attention is focused both on specific techniques within the school designed to overcome environmental drawbacks and on programs that reach out beyond the school walls to involve the parents and neighborhood in the learning process. The prime mover behind all these programs has been, and must be, the school principal. He is in the best position to understand and evaluate the needs of his particular community, and even more important, he is in one of the best positions to initiate change.

Many principals do not know their community nor the various avenues of approach to such community groups as settlement houses, PTA's, church organizations, ad hoc committees on housing, sanitation, or police protection. Unfortunately not all principals have become free enough of administrative tasks to evaluate fully the quality, individualized effort, or effectiveness of the reading instruction in their schools. However, there are principals who have found sufficient promise in programs and techniques aimed at overcoming environmental factors to suggest that the coming decade will be one of the most significant in the attack on this aspect of reading problems.

Factors other than environmental, of course, play a role in the problem of reading difficulties. Poor vision, bad hearing, limited IQ, and other deficiencies and inadequate instruction contribute. But none is as pervasive in its relation to reading problems and none is so frequently intermingled with other factors, or becomes the underlying cause, as home environment.

RECOGNIZING THE DISADVANTAGED READER

The general characteristics of the disadvantaged reader, so often identified with the disadvantaged child, are rather well known (Gordon). The child is likely to have a lack of language skills, meaning not only a limited vocabulary, but also a lack of words that may extend to a lack of the very thought processes that lie behind language (Ausubel, 1964). He may have difficulty in handling abstract symbols, in maintaining thought sequences verbally, in interpreting what he experiences, and in communicating what he feels (Deutsch, 1964). In addition, he is likely to have any or a combination of visual and auditory difficulties (Deutsch, 1965), a restricted attention span, little motivation to learn, a low self-image. His initial difficulty in learning to talk "properly" has made it harder for him to learn to read, and, consequently, harder for him to learn to think. With such strikes against him, he falls further and further behind as he continues through school. If school teaches him anything, it is what failure means.

(As always, however, it is somewhat dangerous to generalize. Some of the same symptoms, the courses of which are altogether different, are encountered in reading problems.)

HOME AND FAMILY INFLUENCE

What are the factors in the home that are most often related to reading problems rooted in the environment? A low socioeconomic level is one, although parental attitudes and behavior may be more significant than the parents' education, income, or race (Dave, 1963). The size of the family, the child's position in it, and the opportunity the home presents for learning experiences relevant to school are also important (Gordon, 1965 article). The usual picture is of a large, impoverished family, usually mother-dominated (Gill and Spilka, 1965), living in a noisy, overcrowded atmosphere that is often permeated with an underlying panic (Deutsch, 1963). The basic necessities are uncertain, adults unpredictable (Maas, 1951), and the world suspect and threatening. Communication is often through gesture and other nonverbal means (Milner, 1951), while the language used is terse, not necessarily grammatical, and limited in form. The home has few books, few toys, and little self-instructional material. The children rarely venture beyond their own neighborhood or even their own block. They are rarely read to, and there is little contact between parent and child. Rewards and

[1] References are cited at the end of each chapter.

punishment (often physical) are immediate (Kohn, 1959; Leshan, 1952). Learning to postpone gratification is as irrelevant to their way of thinking as learning for learning's sake (Gordon, 1964).

In such a noisy and chaotic environment, children learn to adapt as best they can. They may learn, for instance, to screen out sounds, sometimes only too well. Their habits of listening and hearing, and their speech patterns and pronunciation may prove inappropriate to the traditional learning situation in school (Jenson, 1963; John, 1963). In addition, they may suffer from undernourishment or lack of sleep. They may become inattentive, disturbingly aggressive, or ominously withdrawn (McKee and Leader, 1955). Their absentee rate is probably high.

This generalization, however, suffers the drawback of all generalizations—it is just that and nothing more. It points with accuracy to no individual case. Some children of poverty have learned to read easily despite economic deprivation; some economically middle-class homes are as barren of cultural advantages as the poorest (Gordon, 1965). Middle-class parents whose anxiety about their child's progress in school takes the form of reproach rather than encouragement may contribute as much to their child's reading problems as lower-class parents who were dropouts and whose hostility or lack of sympathy toward school is reflected in their child's attitude. More lower-class parents than middle-class parents, perhaps, are seriously concerned about their child's progress in school (Riessman, 1962, p. 11), but some may put more emphasis on being "good" and staying-out-of-trouble. Parents' feelings about education and the public school and their interpretation of their own role in the learning process are clearly related to the child's motivation and achievement.

The research on home environment emphasizes its undeniable importance, even though much of the research has tended to be speculative and much has been based on relatively small and unrepresentative samples. Overall, the evidence tells us that there is a correlation between certain home conditions and poor adjustment in school (Gordon, p. 385). It does not pinpoint a necessarily causal relationship; it does not indicate a single course of remediation. However, certain gains made in recent years do imply significant approaches to the problem. A few systematic studies of compensatory programs have shown that combined environmental and educational intervention have been accompanied by improved functioning for large numbers of children (Gordon and Wilkerson, 1967, p. 27). The fact that even a 6-week enrichment program, coupled with a series of informational and supportive conferences with parents, raised both the intelligence and reading readiness scores of a group of Tennessee Negro children to national norms is significant. Four principals involved in a New York City program in which parents were used as reading assistants found a common meeting ground for professionals and parents to attack the reading problem. The principals believed that when the school ceases to be regarded by the parents as a "foreign enclave" in their midst and when it becomes "their schools," they then will be able to help their children.

Motivation may well prove one of the most promising areas to emphasize. Programs involving teachers, parents, and children, and using a wide variety of motivational schemes have been found to have a threefold effect. They have raised the level of expectation on the part of the teachers; have greatly increased parent participation both in the school and in the home-learning situation; and have helped youngsters find success in learning.

SOME PROMISING PROGRAMS TO OVERCOME ENVIRONMENTAL DEFICIENCIES

Blame for reading failure has shifted subtly in the past few years. There was a time when a child's failure to respond to education was looked upon by the schools and by the parents as the child's failure. That time is past, particularly in the big cities. Now the parents say that, if the child does not learn, something is wrong with the school. Both its content and its process are failing to get to the child. In many ways, parents are using the child's ability to read as their chief criterion in evaluating the school. If their child does not learn to read, then something is wrong with the whole system.

Educators tend to agree, but with another interpretation. Education journals reiterate that the schools should be able to take any child, from whatever background and with whatever equipment, start with him as he is and educate him to the full extent of his potential ability.

With the burden of performance shifted to the schools, the search for solutions to learning difficulties has widened. Despite the fact that schools are not responsible for the environmental factors that inhibit the development of reading skill, there is tacit acceptance that they must overcome them, perhaps

even before getting on with their traditional job of formal education. The responsibility for meaningful action necessarily becomes that of the principal. The introduction of emphasis on Federal cooperation and financial aid to help those least able to learn in traditional ways has caused the school administrator to cast his nets wider, out into the community and into the homes. A few examples will indicate the extensive range of these efforts.

In *Sumter, South Carolina,* a preprimary project for children of ages 3 to 5 is designed to involve parents, staff, and community agencies. The objective is to head off crises before they occur. A preschool checkup is administered by a psychologist who observes and tests the child while his parents are simultaneously interviewed by a social worker. Team members summarize their impressions and later each child's record with a consultant group made up of a project staff member, a local pediatrician, and a child psychiatrist. Parents of children with dependency or immaturity problems are offered immediate family counseling and concrete plans for achieving maturity and independence in the child before he enters school. Children who lack adaptive skills are offered 6 weeks of preeducation even before Head Start. Children with severe problems are referred to psychiatrists. The project staff makes use of all the community's resources and helps to instigate church programs, neighborhood play groups, family outings, pooled efforts by parents, and the development of new city recreation programs especially aimed at the preschool disadvantaged child.

In *Anniston, Alabama,* a new curriculum has been designed to permit students to progress at their own rate. When the project is in full operation, there will be a nongraded program of year-round education for children aged 3 to 19. Planning the extensive curriculum to ensure a sequential course of study geared to individual differences includes the students themselves. The program encompasses day care and Neighborhood Youth Corps programs, Head Start classes, after-school personalized programs for dropouts, and adult literacy training, as well as the formal school curriculum.

Across the Nation from Kirkland, New Mexico, to Cedar Falls, Iowa, to Ypsilanti, Michigan, teachers, social workers, and paraprofessionals are being used in a variety of ways—as team teachers, teachers' aides, community aides, home visitors, and guidance counselors—to overcome environmental factors and to individualize instruction.

The principal, then, can consider a number and variety of ideas that will alleviate the reading problems of the children in his charge. Next comes the problem of deciding which of the many ideas meet the needs of the children, are within the capabilities of his staff, and lie within the framework of financial reason. Some patterns do emerge which indicate the direction in which most schools are moving in order to overcome environmental drawbacks.

Current efforts tend to concentrate on the preschool and elementary child. This is not to say that remedial efforts with older children are being abandoned, but the long view seems to suggest that early concentration will not only compensate for environmental deficiencies but also obviate the necessity for later remediation.

Another significant pattern involves emphasis on individual instruction. The existence of staffing problems complicate achievement of individual attention, making it possible only with the more extensive use of paraprofessional help, better regrouping of professionals, and more serious attention to inservice training.

Most of the newer programs stress the involvement of the parents and the communities. Without the understanding and support of the forces outside of the school, much of what is undertaken within the school walls can disappear when the afternoon school bell rings.

The most effective programs are geared to the unique needs of the children and the communities in which they live. Any generalization about the kinds of curricular and extracurricular efforts needed for the children in any specific community can be only half right. The principal who knows his teachers, his children, his parents, and his community is in a much better position to determine the kind of effort needed in his school. He may find ideas in other places, but the patterns he evolves have to be cut from his cloth to fit his clientele.

All these patterns overlap. None is exclusive, as the following examples of programs that show promise indicate. Their division into categories is only a device to serve as a guideline to the reader.

Individualized Instruction—Nongraded Classrooms

Pittsburgh has what is perhaps the Nation's first successful operation of an individualized instruction operation on a systematic, step-by-step basis throughout an entire school program. Individually Prescribed Instruction stimulates the pupils to work on their

own. A combined second- and third-grade reading class of 63 pupils, for example, uses a learning center and two adjoining rooms. Two teachers and the school librarian act as coordinators and tutors, while the pupils proceed with the various materials prepared by the school's teachers and IPI's developer, the Learning Research and Development Center at the University of Pittsburgh. In the program, each pupil sets his own pace. When he completes a unit of work, he is tested immediately. If he gets a grade of 85 percent or better, he moves on. If not, the teacher offers a series of alternative activities to correct his weaknesses, including special individual tutoring. There are no textbooks. Virtually no lecturing to a class as a whole is done. An indication of success is the Oakleaf Elementary School which has the highest percentage of attendance in Allegheny County and one of the highest in the country. Many students have performed from three to four grade levels above those which normally would be expected at their age.

Troy, Alabama, has a nongraded communicative arts program at the Charles Henderson High School which has replaced the traditional program with five phases of learning in which pupils are grouped on the basis of standardized reading test scores. The 400 students who take part can, upon demonstrated achievement, move from group to group at 6-week intervals. Instruction is highly individualized and ranges from remedial reading work to college credit courses.

Portsmouth, Virginia, has had ungraded classes for retarded readers since 1956. The success of its program, and how it was achieved, is dealt with among the case histories at the end of this chapter.

A variation of the individualized instruction plan is used in *Las Vegas, Nevada,* where students spend from 1 to 2½ hours a day in self-directed study at a resource center, the library, or an open laboratory.

Individualized Instruction—Adding More "Teachers"

In *Cedar Falls, Iowa,* as in many other cities, three teachers are assigned to two classes. The extra teacher, who may be either full time or part time, forms a group of pupils who are having the greatest difficulty with reading from both classes and provides them with intensive help on reading deficiencies.

In *Ethete, Wyoming,* two kindergarten teachers operate as a team and devote full time to teaching while teacher helpers assume the clerical duties. A half-time teacher's aide is available for every classroom through the fourth grade. A lower pupil-staff ratio through the use of auxiliary personnel now permits concentration on reading programs with a student body that is 85 percent American Indian.

The shortage of teachers for reading programs is causing school systems to look to their lists of retired teachers. In *Detroit,* for instance, more than 30 retired teachers have come back into the schools for 2 days a week to conduct all-day remedial classes.

The use of tutors and auxiliary personnel is varied. In many places, the Teacher Corps interns work with classroom teachers in efforts to reduce class size, in helping on field trips, and in making home visits.

Princeton, Minnesota, uses six part-time tutors and 150 Future Teachers of America to assist the regular teaching staff. Again, the object of the program is to increase adult contact and give more individualized instruction.

(Reducing class size, of course, is a major effort everywhere. However, much money is entailed in reducing a class average, even from 30 to 27 pupils, and there is no conclusive evidence that better learning takes place.)

Northeastern University, under a Ford Foundation grant, is sending teacher interns as tutors to help junior and senior high school students from Boston and Revere to read more efficiently and critically. Thus far the experiment shows an average 7 months' gain in vocabulary and comprehension during the 13-week course.

In *New York City,* 10-year-olds are tutoring 7-year-olds. It is part of a Hunter College tutoring program involving 30 of the college's prospective teachers and 62 fifth- and sixth-graders from PS 158. The college juniors tutor the youngsters who, in turn, tutor second- and third-graders. The fifth- and sixth-graders get help with their own learning problems from the college students, then reinforce what they learn by helping younger children who have similar difficulties. An unlooked-for advantage is that the older students have gained new respect for themselves and for their classroom teachers.

Various kinds of aides are much a part of the picture in attacking the problem of reading. Many urban school systems are using aides to visit the homes of children, newly moved into the district, who are retarded in reading. Some schools have half-step grades for these children so that an ostensible second-grader, for example, can get intensive help before stepping into the "real" second grade. The aide who visits the home discusses the school's program with the mother, and often in her own

dialect or language explains that her child is not being held back but is getting extra help.

In *Garden Grove, California,* teacher aides follow junior high remedial reading students into their social studies and science classes where they tape the lessons and work later with the students, going over the recorded lesson as well as written material. This method helps students with the heavy vocabulary loads in those subjects.

The National School Volunteer Program is well known. It began in *New York City* and has spread to most of the major cities. Women volunteers are assigned to one school for at least 3 half-days a week during the school year to serve as individual tutors. Although the School Volunteers have no figures to show reading improvement, administrators have had loud praise for their efforts. Besides giving the children individual, undivided attention, these tutors are able to discover little situations that can be of great help to the classroom teacher. For instance, simply finding out that a little girl of 8 stays up half the night watching the late show can explain her lack of attention in class and lead to some efforts to convince her mother of the value of sleep.

Teacher Improvement—Inservice Training

Probably the most neglected technique for attacking reading problems is inservice training for teachers. Principals who have used inservice training have found it most effective when it has been concentrated in two areas: (1) helping teachers change their attitudes toward children with learning deficiencies so that they will have a higher expectation for them, and (2) helping teachers gain the tools and techniques that lead to success with these students. Without the second, the first stands to lose by default.

In many districts there is no systematic way for teachers to become familiar with better methods of new materials. Regional centers help by providing a locale which teachers can visit in order to see what is new and available, as do demonstration projects on college campuses or in the larger cities, but the ordinary busy classroom teacher usually has no opportunity to visit such projects. The principal sometimes can provide this opportunity.

Much—probably too much—of what teachers know about new materials for the classroom is learned from the textbook and equipment salesmen who, quite naturally, represent one product and one point of view.

Creating New Materials

Disenchantment with available materials for the hard-to-teach beginning student has resulted in many do-it-yourself products, some of which have since become commercially available. One such group of materials came from *Central, New Mexico,* where the school staff prepared a series of preprimers and readers for Navajo children. Stories and legends from the Navajo parents were translated and edited for the children. All of the illustrations were done by Navajo artists. The content correlates with the environment and experiences of the children. Cost per child, under a project funded under Title I of the Elementary and Secondary Education Act (ESEA), was between $10 and $15. The Detroit school system also came up with stories with which the Negro urban child could identify.

Not all principals can use such a localized approach, but those who can should be ready to provide guidance.

Extending the School Year

There is nothing new about summer school, but often it offers a principal the chance to be innovative in working against environmental deficiencies.

In *Chicago,* special summer schools devote 40 percent of the teaching day to the language arts, and much of what is learned during those summer months is finding its way back into the formal classrooms in the fall. Head Start itself began as a summer venture and, in many places, has been incorporated into the regular school year. The availability of college students during the summer has involved them in many tutoring projects across the Nation, particularly in the urban centers.

Sometimes fresh ideas spring from summer projects. In *St. Louis,* for instance, students in 76 classrooms are encouraged to read by giving them books as prizes. To get his first book, a student need only show that he has a public library card. Then he can earn up to nine books, getting one for every two he reads outside of class. The program costs only $4,000 to initiate, and the State education department provided the money under Title I funding for library books. So many of the pupils earned the maximum number of books, however, that the schools were compelled to seek more money from the State. The parents also became involved. More than one father built a bookshelf for his child, sometimes the first bookshelf the home had known. Some

mothers, for the first time, got library cards for themselves. Among the students, many poor readers became avid readers. Homes with books encourage reading. Like so many ideas, the St. Louis one grew out of a summer project.

Involving the Community

There is nothing new about the need to involve the community so that it will be aware of the schools' problems and will lend the necessary support when occasions demand. What is new in the equation for many school principals is a broader definition of the community. Making a luncheon address to the local men's club or explaining a change in curriculum to the school PTA does not reach the members of the community who hold themselves apart from the schools. Many mothers, for instance, think of a visit to the school only in terms of trouble. Ordinarily, they have been summoned to hear the worst about their children's progress or behavior.

Today, removing the barriers of strangeness and fear is part of the school principal's job. Ways of accomplishing that range from simple ideas to elaborate plans for better school-community relations.

A *Detroit* junior high school principal, for instance, cleared out a room and furnished it with comfortable chairs and a large coffee pot. Then he let it be known that the parents, mostly white Appalachian in-migrants, were welcome. One by one and two by two they began to come, bringing with them their preschool children. The principal takes no advantage of this captive audience; in fact, unless invited, he never goes near their room. But the mothers are gradually losing their fear of the school and are taking opportunities during their visits to talk with the teachers and the principal. (See floor plan for this community room on following page.)

Mothers who have been hired as teachers' aides or teaching assistants turn out to be links with the community. They speak the language or dialect of the community and, whereas their friends might be afraid, unwilling, or embarrassed to ask questions about the school or the teachers or principal, they have no such misgivings about questioning the aides. Knowing that interaction takes place challenges the schools to make sure the aides know what is going on and understand any curricular changes that are being instituted.

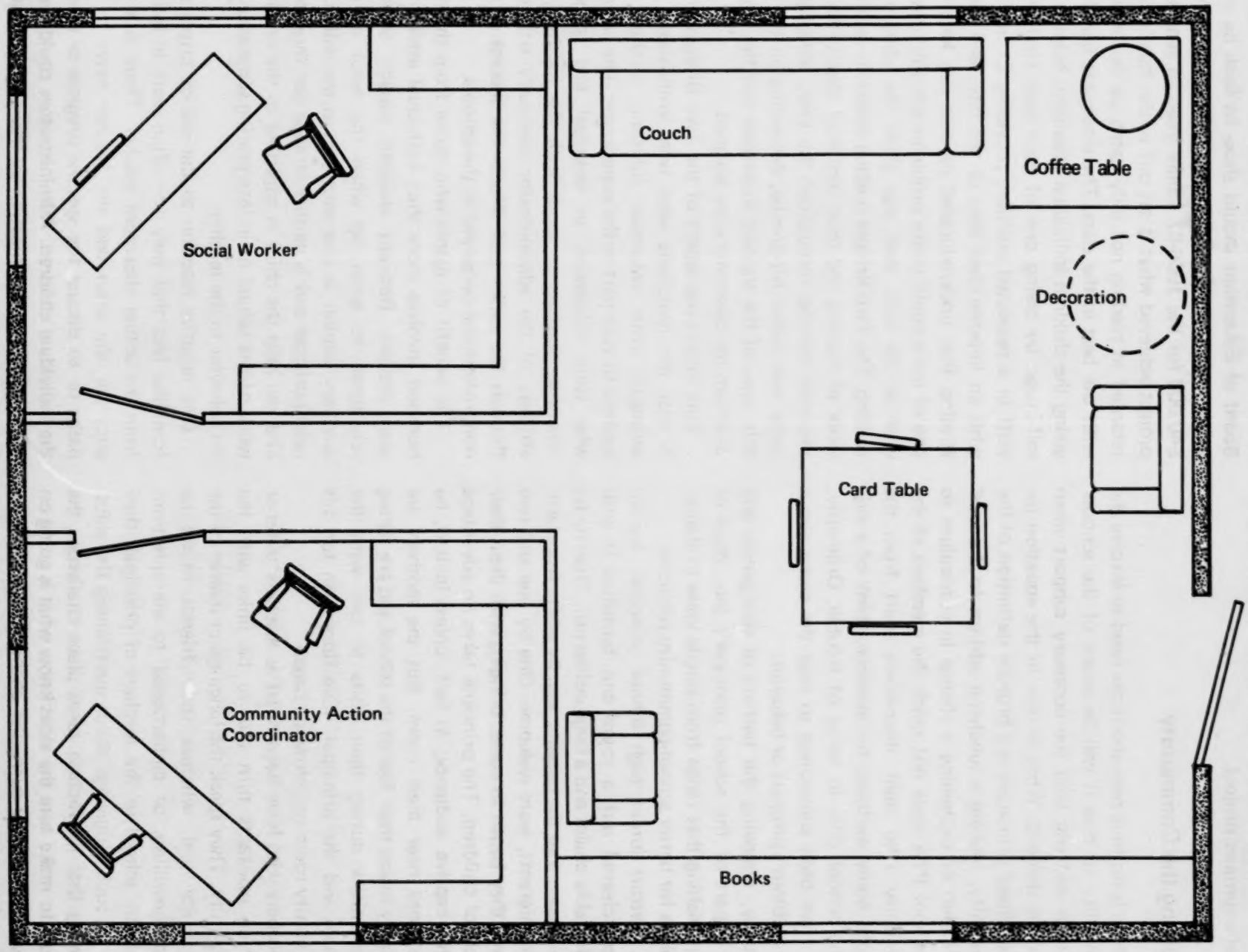
In the Two Bridges area of *New York City,* 21 mothers were hired as reading assistants for 4 hours a day, 5 days a week. There were enormous problems of process and role identification which are vividly described in a report prepared by the Bank Street College of Education. The first program was under an ESEA Title II grant, but the parents thought the Board of Education should show its faith by underwriting the program, which it did when it granted $40,000 for the 1966-67 school year. In general, the project achieved what it set out to do: help children retarded in reading not only catch up but catch up with the best in the class. The intangible benefits of giving the children individual attention, helping their self-image by seeing one of their own kind on the staff in a respected position, providing 21 new links with an impoverished area of the city, and demonstrating that undereducated parents can help solve one of the schools' major problems actually proved as vital as the help that was given the children on reading. The Two Bridges reading assistants received 1 week of training and then continual observation and inservice training throughout the year, although the latter was rather hit or-miss, depending on the available time of the training supervisor and the teachers to whom the assistants were assigned.

One interesting aspect of the Two Bridges project is that the principals who were enthusiastic were swamped with volunteer full-time teachers who wanted to take part in the experiment. The principals who were lukewarm or skeptical had to assign unwilling teachers to work with the mothers. The attitude of the administrator obviously sifts down through the ranks and affects the success of using nonprofessional personnel in the schools.

The benefit of tutors who come from the neighborhood involves more than individual attention to slow readers. Reticent children usually show no reluctance to speak up when the tutor or other auxiliary worker is one who lives in the child's own neighborhood and is neither strange nor threatening. She can help the child in adjusting to the unfamiliar work of the school or in interpreting some aspects of his behavior to the teacher.

One negative reaction to the use of tutors stems from the fact that they too often work in isolation from the actual classroom teacher. There is a tendency for the tutor and the teacher never to cross paths or to discuss the specific progress or needs of the individual children. Administrators could prevent such lack of communication by freeing the classroom teacher for conferences with the tutor.

Many school systems are sending teachers out to work with both preschool and school-age children in the home setting. Actual lessons are taught, with the



COMMUNITY ROOM

mothers and brothers and sisters watching and sometimes taking part. The hope is that the mothers will thereby better understand what the schools are trying to do and also observe and emulate some of the teaching methods.

In *Ypsilanti, Michigan,* for example, teachers try to involve mothers in the education of their children by showing processes through at-home tutoring. Mothers are also invited to go along on field trips and take part in monthly discussion groups for both fathers and mothers. Early returns show that children who have been involved in the Ypsilanti program outdistance the nonparticipating children in achievement, school motivation, attendance, and relationship with adults.

In *Riverton, Wyoming,* a part-time social worker familiarizes parents with school learning projects and also supervises a student-to-pupil tutoring program in which junior high school students help elementary school pupils.

In *San Francisco,* the appointment of a school-community teacher has alleviated many problems. The teacher acts as a liaison between the school and the parent, showing how the parent can help the child to study and read more effectively and how certain discipline problems can be eased with the help of the home.

Los Angeles also has special school-community workers whose job it is to welcome new families to the school district and to help orient them to the school program. Los Angeles is also doubling the class time allotted to teaching reading and has planned a series of 100 parents' classes to show them how to assist their children in learning to read.

Riverside, California, produced a color movie of a Title I remedial reading program in order to inform parents and the general public.

Kansas City, Missouri, encouraged community participation by turning an elementary school auditorium into a first-class professional theatre with a professional director and local theatre group putting on plays for the children. Vocabulary and reading activities accompany each performance.

The tradition of field trips is especially important for the ghetto child who may never have been more than a few blocks from home, and they also serve to draw in the parent. Often parents not only accompany the children but are included in the planning. In St. Louis a direct appeal is made to parents. The principals invite the parents to school where their cooperation in helping the child learn to read is enlisted. They are told of the relationship between education and the kinds of jobs their children might be able to hold. This is reinforced by field trips where the children see people at work and begin to understand the relationship between what they do in school and what kind of lives they can lead.

Using the field trip as a widening experience, the skilled teacher can capitalize on it, both before and after, through discussions, experience charts, listing new words learned, map-making of the route covered, written reports, compositions, poems about the experience, thank-you notes to the hosts, and other activities that incorporate language arts skills.

Community libraries and museums are also entering into new forms of collaboration with the schools. Story hours, parent discussion groups, new materials to appeal to culturally deprived audiences, and more individualized attention to library users are all part of increased efforts. Museums are working closely with classroom teachers to provide the kind of enrichment materials, including kits, for classroom use from the museum that will stimulate learning.

Sometimes the best way to encourage parental interest in education is to offer education itself to the parents. Adult education courses, ranging from basic literacy training through all kinds of formal courses, are being offered nearly everywhere.

The problems of good school-community relations, particularly in the ghetto districts of the large cities, are enormous. However much anybody regrets it, there is a great gulf between the school staff and the parents. Their lives, experiences, and attitudes are so different that they cannot be changed by exhortation. The process of building mutual respect is slow, and some of the new parent groups are impatient. At the same time, some of the teachers feel threatened by the influx of indigent personnel and suspect that giving up any portion of their tasks is somehow denigrating their professionalism. The administrator's task is to smooth the relationship between the professional and paraprofessional by providing for open communications and proper training for the aides.

There should also be open recognition of the possibility of rough seas when the neighborhood or community is invited into the schools. But without the support and understanding of the adults in the community, the effectiveness of what is offered the children can be obliterated.

Multiple Approaches

Part of the difficulty in selecting reading improve-

ment methods is that many experiments have involved a variety of approaches, many of which were used simultaneously, so that it is hard to say what made the difference. Further, many things are being tried that seem to promise success from a commonsense point of view but are hard to evaluate. For example, some 14,200 children in 17 Cleveland inner-city elementary schools have been coming to school early in order to get a free breakfast. The purpose of the experiment is to find out if a well-nourished child from a poverty area will learn better. It will be hard, however, in the Cleveland experiment, to isolate this one element from all other efforts in order to measure its success.

It is equally hard to know for certain which program and techniques will accomplish the most in comparison to the expenditure. The longitudinal studies on the effects of early intervention now going on, for example, will not reveal their final evidence for several years, that is until the first children in the initial studies get into the upper grades.

No principal, however, should be willing to wait for the final word when commonsense suggests that the earlier a child can begin acquiring the equipment for learning, the more successful he is going to be in school. At least the directions that point toward success are clear. The advantage of an eclectic approach, adopting a variety of techniques and programs to serve within and without the school gates, is that it can be tailored to fit the particular community. The principal cannot sit by and wait for the final and ultimate panacea. He can and must act now, for progress in this area, as in other areas, is inherently bound up with a trial-and-error approach.

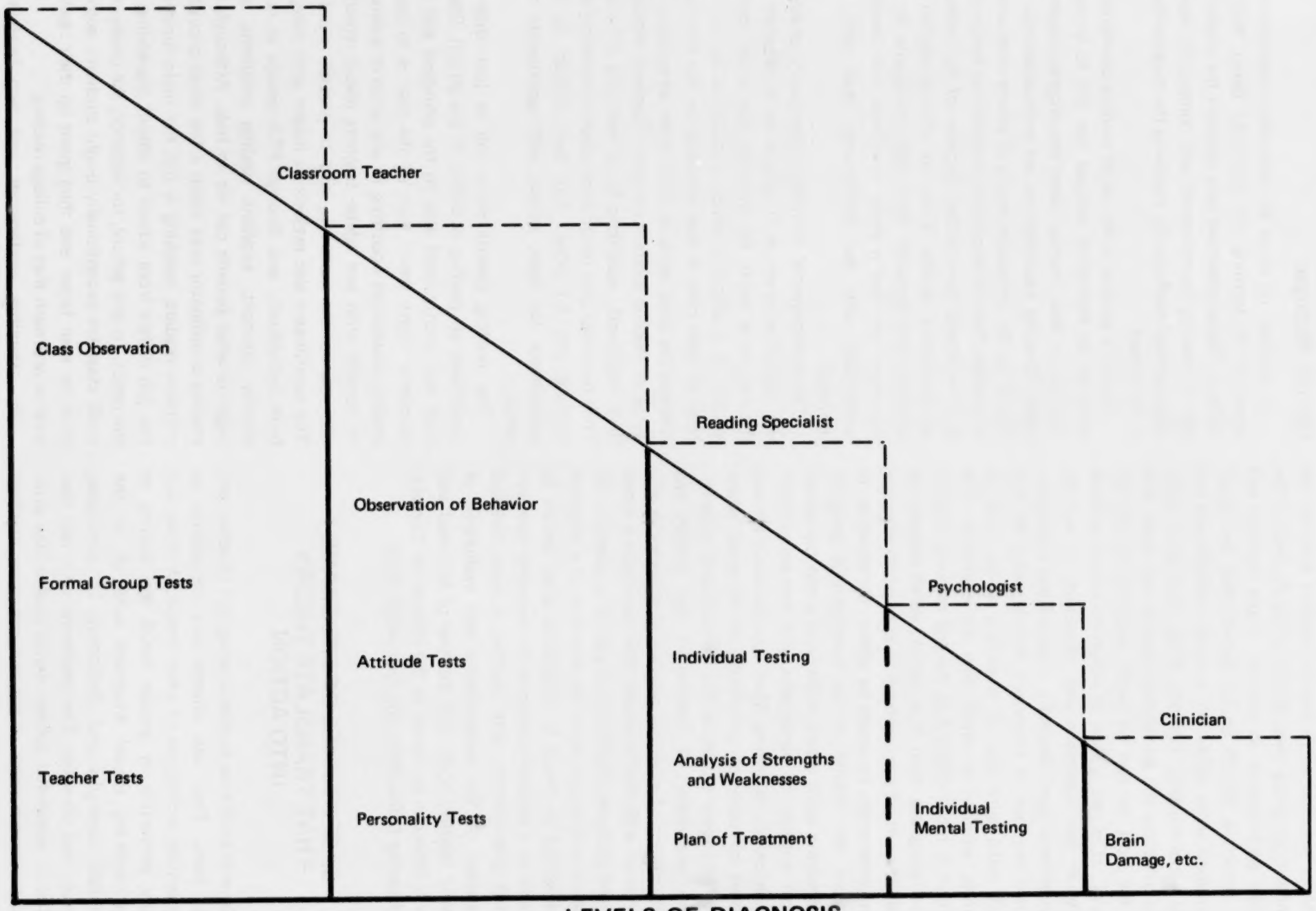
MEASURING AND EVALUATING READING SKILLS

The principal should know some of the problems and techniques involved in measuring and evaluating reading performance. Such knowledge will enable him to see more clearly what programs will help youngsters do a better job in reading and what kind of assistance the classroom teacher or the reading specialist in his building needs.

Though specific causes of reading problems are not easy to isolate or identify, there are ways of measuring certain skills and of estimating whether or not a child is making satisfactory progress in those skills. The principal should think of the diagnosis of a reading problem as something that can be done on various levels—on a classroom teacher level, on a reading specialist level, or on a clinic level. Treatment for reading disability also can be carried out at a variety of levels. These levels indicate the professional training of an individual in test instruments and observation of reading skills for a diagnosis. The classroom teacher has the necessary training (provided he has received approximately 6 semester hours in reading instruction) to observe the strengths and weaknesses of vocabulary, word recognition skills, and sentence and paragraph comprehension. There are formal, standardized group tests that isolate these specific reading skills and give some measure of a child's performance. Most group tests are translated into some kind of grade equivalent. With such information, classroom teachers can make an immediate adaptation of their methods and materials in order to build on the strengths and overcome the weaknesses that are exhibited. The classroom teacher can also use his own tests—that is, informal tests—in order to obtain a description of observable reading performance. Since other factors, such as emotional stability and personal self-esteem, play a role in the child's performance in the classroom, the teacher can make informal observations of the child's attitudes, his willingness to participate, and his articulation and speaking vocabulary.

Someone with more advanced training is ordinarily required to give a diagnosis of problems beyond those described above. A remedial reading teacher or a reading specialist, for example, looks for a more specific analysis of the process of reading. For instance, the process can be broken down and measured in such steps as (1) accurate reception of external stimuli, (2) perception, (3) association, (4) assimilation, (5) analysis, and (6) evaluation. Broader experience with tests and individual diagnostic procedures is necessary to detect deficiencies at this level and to formulate specific treatments to overcome the weaknesses. A remedial reading teacher or reading specialist usually operates at this level and judges the gap between a child's achievement and his ability.

When it is necessary to analyze a case beyond the observable strengths and deficiencies in reading performance and beyond a measurement of the process of reading, clinical personnel usually are needed. Individualized intelligence tests, psychological projective tests, interviews, physiological evaluations, and social considerations are factors that are usually beyond the scope and means of the local school, classroom teacher, and remedial reading teacher. Such factors can be handled by an interdisciplinary clinic. (See chart showing the levels of diagnosis.)



LEVELS OF DIAGNOSIS

Most teachers and remedial reading teachers use standardized group tests to determine the level of the child's performance in reading. Those teachers and the principal should be cautioned that the grade equivalent score noted on a group achievement test may be misleading. For one thing, that score probably indicates the frustration level of the child, that is, the best he can do when applying his utmost energy. It is not a level at which he would perform daily in the classroom and, therefore, is not his instructional level. Secondly, a formal test measures a limited number of behaviors. People using the test must make sure that it is getting at the kind of reading behavior in which they are interested. This caution is more relevant at the end of some instructional programs than it is earlier, when merely the establishment of some general level of performance is being attempted. It would be unfair, for example, to measure the merits of an instructional program emphasizing word attack skills with a test comprised almost entirely of paragraphs with fact-comprehension questions following. More appropriate is the test focused primarily or specifically on the word attack skills that were taught in the instructional program.

An evaluation of reading is not merely the measurement of a certain number of skills but is also concerned with the interests that have been created and the attitudes developed as part of a program. All these considerations merit the attention of a principal or a school in trying to determine what factors to include in a program designed to overcome environmental interferences with reading. A more detailed discussion of the measurement and evaluation of specific reading skills and the use of informal and formal tests can be found in the chapter on *Correcting Reading Difficulties—the Specialist's Role.*

CASE STUDIES OF PROGRAMS THAT TRANSLATE THEORY INTO ACTION

Several brief case studies of programs in action are cited here. They are chosen not necessarily as representing archetypes of what should be done, but simply presenting in greater detail the activity in some working school situations with all of the attendant strengths and limitations of personnel, finance, and clientele. The treatment of a few case studies in somewhat greater depth enables the principal to foresee some of the considerations involved when new programs are begun.

Detroit, Michigan

A number of plans to overcome environmental obstacles to learning are currently being tried in Detroit. Those presented here concern the combined use of reading coordinators and community agents and practical methods for involving the neighborhood in the school.

Detroit's success in the use of reading coordinators assigned to individual schools has led to a major increase in their number since the program began in 1959. Reading coordinators are enthusiastically endorsed by the principals, many of whom were unable to oversee their instructional programs as thoroughly as they would have wished because of the press of administrative duties. They are also supported by teachers who consider their help invaluable in the classroom and find it easier to discuss their teaching weaknesses with the coordinator than with the principal.

The coordinators' activities cover every phase of the school program as it affects or is affected by reading. As a result, for instance, the social science teacher in a school in which a record of the reading level of each class is now available for the first time changed his basic texts to meet more adequately the range of reading levels in his class. Teachers' attitudes have improved, according to at least one principal. They no longer give up on poor readers, believing that nothing can be done, but turn instead to the coordinator for help, advice, and appropriate materials.

The reading coordinator's job is just that—to coordinate all reading activities in the school. She is both the instructional aide to the principal and the teacher's "right arm." Part of the task is to assess reading disabilities occurring in any areas or subjects, to consult with and advise teachers about remedies and appropriate materials, and to provide supplies. The coordinator also establishes liaison with parents, both individually and through PTA groups or community councils, explains reading problems, and suggests what parents can do to help. Although the reading coordinator may teach a few small groups of problem readers, teaching is not her main function. Her job differs from school to school, depending on the needs. In one school, for instance, she conducts a small class for exceptionally bright students, helping them to scan faster and thus speed up their reading level to approach that of college reading.

By attending conferences and two in-training sessions each month, reading coordinators keep

abreast of new materials and techniques, reporting back on new developments. Teachers, in turn, submit brief monthly reports on the reading progress of their classes to the coordinators, enabling them to place new pupils as appropriately as possible while they themselves become more acutely aware of the reading progress or lack of it in their own classes.

The reading coordinator usually is assigned a room of her own, although on occasion she may share quarters with a community agent, another newly created role whose function is to bring the school and community more closely together in a variety of ways. Teamwork between the two offers obvious advantages. During the school semester, the coordinator will help new teachers to adjust, demonstrate new materials, visit classes, review all material related to reading being used, and assess the reading level of each class and each new transfer pupil. She will help identify poor readers, suggesting remedies and materials for their use, and perhaps undertake a small class of those who need help.

She is allowed a budget to build up a library of supplementary materials, and some have set up "Reading Adventure Rooms," open before, during, and after school, where adults as well as children can borrow paperbacks with fewer restrictions about their return than most libraries demand. Expense money is allowed to permit the coordinators to attend conferences and workshops arranged by the central staff.

An administrator setting up a reading coordinator program will want to define the role as clearly as possible. Detroit held a 3-week orientation session for the reading coordinators before the program began and carefully outlined their role at workshops for principals, who, in turn, outlined it at orientation sessions for their staffs. Although the role is consultative, one principal has found the coordinator is more effective if given a supervisory status, fully backed by the principal. What threat this held for the teachers diminished as the reading coordinator's helpfulness became evident. At the same time, it made the teacher's cooperation almost mandatory. Obviously, the job calls for many subtle relationships and depends on personality as much as skill. But it can be as far reaching as the principal and coordinator care to make it.

The principal of an elementary school, located near the scene of the 1967 riot in Detroit, readily admits he is not an expert on the environment that surrounds his school. Indeed, his home is 40 miles away. But he is making every effort to bring the school to the community and the community to the school. Although his school starts with prekindergarten and goes to the seventh grade, his programs involve 3-year-olds to 80-year-olds.

The prekindergarten classes are relatively new. For a time it seemed there simply was no space for them until the principal hit on the idea of lopping off part of the gymnasium to make room. The nursery school classes concentrate on reading readiness. One novel aspect of the program is that parents must come once a week or forfeit their child's place in the class.

The principal works closely with his community agent, and, on the advice of this agent, a Drop-In-Room for Drop-Outs was set up. This room provided space for lounging about, playing ping-pong, and browsing, if they cared to, through magazines and books. The room is open from 3:30 to 10:00 p.m., and the only limitation is age—14 to 25. Approximately 50 have taken advantage of the plan, a number of them Black Muslims. Several have become teachers' aides including three young unmarried mothers.

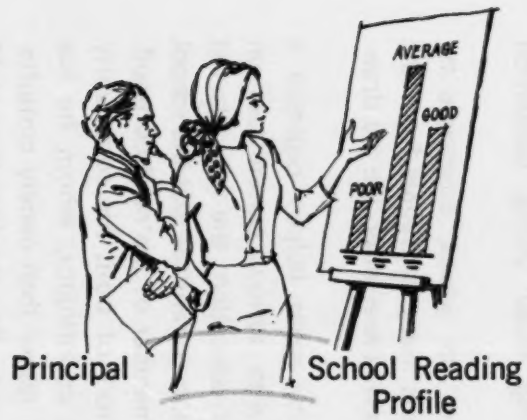
A Community Room for adults, supervised by Vista Volunteers, attracts many oldtimers from the neighborhood. Coffee and conversation are the drawing cards.

When the community agent helped organize a Community Council, with various committees on housing, sanitation, and education, the man elected chairman of the education committee was the school custodian, a long-time member of the neighborhood.

The principal's support of both his community agent and his reading coordinator, whom he has placed in a supervisory rather than merely consultative role, has paid dividends. For the first time in 12 years, the school's primary class measured up to .002 percent of the national average, an encouraging improvement. How much weight should be given to each factor in the changes the principal has made, he finds impossible to assess; but the fact of significant change is there.

Portsmouth, Virginia

Portsmouth, Virginia, provides a good example of the thoughtful planning and preparation behind the successful use of nongraded classes for poor readers. The aim of the nongraded classes, of course, is to provide more individualized instruction as a way of overcoming environmental obstacles to reading. It also eliminates the unrealistic pressures that stem from a program in which all 6-year-olds are expected to do first-grade work and all 8-year-olds to do



Principal School Reading Profile

Consults with Teacher on Classroom Grouping

Reading Coordinator's Activities

Cooperates with Guidance Counselor

Tutoring Session

Conference with Parents

The reading coordinator is often a liaison among the people who are interested in the reading problems of the children in the school.

third-grade work. A child is treated as a learner rather than as a member of an age group. The example of Portsmouth illustrates the beneficial side effects such an approach can have.

Portsmouth began its program of ungraded classes for the "educationally retarded" in 1956, just after the school system had reorganized to include junior high schools, and the problem of placing 14-year-olds not yet ready to do junior high school work, but too old to remain in elementary school, became acute. Reading, of course, was one of their major stumbling blocks.

The success of the initial program—some 80 percent of the students in the original ungraded classes moved into regular classes, and half of them graduated—prompted the extension of the program downward through the elementary grades to take in the child capable of catching up sooner.

Many children who had known only failure before have now experienced success. Some have joined in extracurricular activities for the first time. Their self-image has improved; the absentee rate has dropped; and discipline, once a problem, is far better. Their scores on reading tests also have improved, sometimes dramatically. A number have been able to make up 2 years in one.

The regular classes, no longer held back by slow readers, have benefited too. It is significant that, while the median IQ of the school population has dropped six points since the program began, the reading level has been maintained.

Teachers also have profited. In the ungraded classes they have become more expert at diagnosing individual learning problems. As a consequence, the children have gained a better understanding of their own strengths and weaknesses. Parents, brought in from the beginning, have responded with approval and have shown greater interest as they see their children progress. Their fear of stigma attached to children in the nongraded classes has given way to pride in accomplishment.

From a small beginning, the program has grown so that nearly 20 percent of the system's elementary classes are now upgraded, not all of them in economically deprived areas. The success of the program in the lower grades has made it possible to cut down the number needed in the junior high schools. So aware is the assistant superintendent in charge of instruction of its educational benefits that he would like to see the program extended to all classes, for quick as well as slow learners.

The Portsmouth program evidences that the ungraded classroom is both corrective and developmental. Its aim is to take the child, regardless of age or grade level, and move him along at his own pace. Each class requires a daily plan of developmental activities tailored for each child, activities that he can pursue on his own. The plan frees the teacher to deal with individuals or small groups. The focus is primarily on the language arts—reading, writing, and speaking—and mathematics. Classrooms may contain children 3 or more years apart in age, and seven or more stages apart in reading achievement levels. "It's nothing new," Portsmouth's assistant superintendent has pointed out, "at least not to any teacher who has taught in a one-room schoolhouse."

Children are carefully screened before being enrolled in an ungraded class. The responsibility is primarily the teacher's, but the principal and general supervisor join in the final decision. Standardized intelligence and achievement tests are not relied on too much, since they may reflect frustration rather than capacity. Teacher evaluations, past performance, absenteeism, and physical and psychological tests weigh more heavily. The children accepted are those who are slow learners or educationally retarded (but not mentally retarded), and those with emotional or physical problems such as defects of sight, hearing, or speech that interfere with learning. The school takes the initiative in explaining the program to the parents and seeking their cooperation. Home visits are made by the teacher.

After the initial screening, specially designed tests are given to determine to what extent physical impairment, social deprivation, emotional maladjustment, or intellectual limitation contribute to the child's slow development. The diagnosis, of course, is essential if the educational procedures that follow are to be individualized.

At the elementary level, the ungraded classes are divided into primary and intermediate classes—the primary class in place of grades one through three and the intermediate class in place of grades three through six. Class size is reduced from 30 to 25. Since the children capable of catching up are now noticed earlier, the few junior high ungraded classes that remain are mainly for slow learners only. They are prevocational, followed by an ungraded work-study program in senior high.

There are also preprimary ungraded classes for children old enough to enter school but not yet ready for first-grade work. All beginning children are screened before the school term begins by a team of classroom teachers, general supervisors, psychologists,

and visiting teachers at a Pre-School Readiness Evaluation Clinic and a Pre-School Medical Evaluation Clinic. If, after a year in the preprimary class, a child is still not ready for regular class, he moves into the ungraded primary.

The preprimary is structured, concentrating, among other things, on reading readiness—recognition of letters, letter sounds, and whole words at sight. Audiovisual equipment, recording tapes, and language kits are used. The primary and intermediate classes also concentrate, of course, on reading. Basal readers with which the children have not previously experienced failure are used; and a wide range of "high-interest, low-skill" supplementary reading material is available for use both in class and at home.

In a typical intermediate class, for example, four or five children may be sitting in a corner with the teacher, discussing points related to a story they are about to read. After reading it silently, they will discuss it again to test their comprehension. The other children are at work at their desks. Some are reading, some are writing, and some are doing math problems. A boy who can recognize words easily but has difficulty understanding them in context may be quietly drilling another whose word recognition is weak. The flashcards he uses are made especially for this activity by the teacher. "Plans for the___" which fill the blackboard, have been made out by the teacher and class together. "Spelling—Unit 20" is listed as a task for all children, but their separate books present Unit 20 at different levels. There are directions for the class in general and directions for certain children in particular. The atmosphere is cheerful, concentrated, and purposeful. The children look happy and secure.

Portsmouth attributes a good portion of its success to its careful screening procedure. Principals helping to set up the program in their schools became part of a team with the classroom teachers involved as well as the school nurse and other medical, psychological, or guidance personnel needed to screen prospective candidates for the ungraded class. Only such a broadly based team could help assess specific education remedies for the specific defects encountered, once the screening tests determined the child's level, his difficulties or cluster of difficulties—whether social, intellectual, or emotional.

Title I grants helped Portsmouth expand its ungraded program—paid for new projectors, language kits, and other materials. Although most of the money has gone to teachers' salaries, a third of the classes are paid from the regular budget. Over a period of years, Portsmouth has been able to build up a supplementary library of "high-interest, low skill" readers at $2 to $3 a year per child. Far more such material is available today than when Portsmouth began its program.

Reducing class size for the ungraded classes did not prove a problem. Portsmouth found, for instance, that six regular classes of 30 children could be divided into one of 25 and five of 31. With the regular class far more evenly balanced than before, the addition of one extra child did not matter. The teachers would like to see the ungraded class reduced even further in size, however. Not every child really gets individualized instruction in a class of 25, though more do than before. Portsmouth will join Old Dominion College in a work-study program for its junior students, the future teachers working as aides in the ungraded classes. It will help to further individualized instruction and, in addition, help answer the need for more teachers experienced in ungraded class work.

Teachers have to do more daily planning for the ungraded class, although the reduced class size is a compensation. Portsmouth chose from among its best teachers for the ungraded classes and particularly sought those who had experience teaching more than one grade. Most had had experience teaching more than one level at one time, since regular classes already used tri-basal readers for slow, average, and superior students. In addition, the school system had prepared an extensive teachers' manual with suggested types of independent activities for children in the regular classes. Portsmouth has frequent inservice meetings for its ungraded teachers; they would like even more.

Meetings with parents require that teachers be sufficiently informed about the methods and aims of the program to explain it without giving rise to misunderstanding or fears that children will be held back. Teachers must be prepared also to encourage continued contact with the parents. Report cards, too are a consideration. Portsmouth uses an A-B-C system, followed by a numeral representing the grade level of work. The principal and teacher together determine the grade level of any child transferring to another school system.

Indianapolis, Indiana

There are many variations in the use of tutors, but one of the most closely structured programs is the one in Indianapolis. It illustrates both the advantages of a carefully planned program and the use of

nonprofessionals drawn from the immediate neighborhood of the school.

Since it began, many Indianapolis children who were not expected to read at the end of the first grade are reading and reading well. Called "programed tutoring" and scientifically designed, it is saving poor-risk first-graders from failure and turning them into average readers. It has been so successful that the Ford Foundation has given a grant to extend it to those children who seem to have the least chance for success.

The program uses neighborhood tutors with no special training for teaching except that given in the program itself. The use of nonprofessionals not only saves money, but the children respond to people who can speak their own language and understand their problems, perhaps firsthand.

The difference between programed tutoring and the normal one-to-one tutoring is that programed tutoring carefully structures the behavior of the tutor who is told how to act and what to say. She follows precise written instructions in dealing with the children. In five steps, the tutor leads each child through his reading lesson, using the questions and directions that have been written for that specific lesson.

The first grader selected for the program reports daily to the tutor for about 15 minutes. The tutor asks the child to read the regular lesson, and if the child responds correctly to a unit of work, a new unit is taken up immediately. Only when the child makes an error does the tutor follow the programed procedures. The student does not have to drill on elements he already knows.

Success is encouraged by frequent praise of the child's progress. The child knows that as long as he continues without interruption from the tutor, all is going well. Failures are not stressed and errors are not called to the child's attention in a deliberate fashion. When the child makes an error, however, he is stopped and the problem is isolated for specific teaching.

Little space is required for the program. A small corner or a small room with one table and two chairs is all a tutor needs to function. Children report to the tutor at 15-minute intervals. When one finishes, he returns to the classroom and advises the next child to report to the tutor.

Indianapolis uses the programed tutoring approach primarily in disadvantaged area schools, selecting children from the bottom fifth of the first-grade classroom. School officials agree that the technique of programed tutoring does not have to be confined to disadvantaged areas nor to the first grade, but they find that the continual verbal reinforcement of the tutor and the continual stimuli of her questions are particularly beneficial for the disadvantaged child.

In setting up a similar program, principals would need to consider the following things:

1. The number of poor readers who could benefit from this kind of tutoring needs to be estimated in order to determine the number of tutors needed. A tutor can work with a maximum of 15 children a week.
2. Tutors must be carefully trained in the use of the technique, with ample opportunity to see it demonstrated and to understand the principles of reinforcement behind it. Indianapolis uses seven 3-hour sessions for training its tutors.
3. Participating classroom teachers and administrators must be willing to accept the neighborhood tutor and to cooperate in making the necessary arrangements for efficient operation.
4. A minimum of space and materials is necessary for programed tutoring. However, with the tutor as a full-time employee, the program costs approximately $125 per child per year, including materials and supervision.
5. A member of the regular school faculty should be in charge of setting up the program and training the tutors. The principal may either take the responsibility himself or assign it to someone else. Programs involving more than one school, however, should be under the administrator in charge.
6. Although the technique is successful with students of average and above-average ability as well as below, the greater the ability of the student, the less gain is shown.[2]

THE LEADERSHIP ROLE OF THE PRINCIPAL—A GUIDE TO ACTION

Although there are many combinations of ways to overcome environmental obstacles to reading, one fact emerges clearly: Schools must take the lead in

[2] Information on programed tutoring may be obtained from Dr. Douglas Ellson, Indiana University, Bloomington, Indiana.

initiating change before improvement can come about. Factors producing change are many, varied, and intertwined. Neighborhoods can change in some areas, for instance, almost overnight. But the crucial factor in improvement is change initiated by the school principal.

As Henry Brickell, Associate Dean of Education, Indiana University, wrote: "The administrator may promote—or prevent—innovation. He cannot stand aside or be ignored. He is powerful not because he has a monopoly on imagination, creativity, or interest in change—the opposite is common—but simply he has the authority to precipitate a decision. Authority is a critical element in innovation, because proposed changes generate mixed reactions which can prevent consensus among peers and result in stagnation."[3]

This does not mean that the principal should make sweeping changes as a private decision, imposing them as a *fait accompli* upon his staff, the children, and the community. The most effective innovations have been those that were mutually worked out by all concerned. But there has to be a point in effecting any change when one person gives the signal to start.

Since the interaction of the community, the home, and the school is directly related to reading problems, the first task of the principal is to get to know his community and neighborhood thoroughly in order to understand the specific environmental factors that may be contributing to reading difficulties. Neighborhood changes, particularly in the larger cities, may have made much of the principal's previous familiarity with a neighborhood woefully obsolete. What he hears through the organized, traditional channels, such as long-established clubs and PTA's, is probably only part of the story. It is the inarticulate, invisible, unrepresented parents and their children who are probably in the most desperate need for help. Reaching the hard-to-reach cannot be done through traditional channels. It requires new methods and a flexibility of high order. It also requires the assumption of new roles for the school and new roles for some of the staff.

Few principals are trying to do the job alone. Instead, they are trying to reach the groups—parents, business, labor, welfare, church—that can help the schools discover how to be more effective. They are willing to air differences of opinion and willing to learn from outsiders. All of which is extremely easy to say and extremely difficult to do. In many cases, the principal will be dealing with people who have had none of the ordinary training experiences in group work or in leadership. Their lack of savoir faire includes ignorance about procedures of conducting a meeting or decisionmaking, even in small groups. They are often people who are uncomfortable in a school setting and embarrassed by their own grammatical errors or inarticulateness. Their uneasiness is often matched by the teaching staff who prefer the enjoyment of talking with others of similar background and experience. The principal's attitude, which is usually highly contagious, will determine to a great degree the attitude of his staff. It will also probably be "read" with surprising accuracy by the members of the community.

With all the necessity for involving the community, the principal must still focus his main attention on the school. He sets the tone, and whether the school becomes a learning center for teachers and administrators as well as children or something a great deal less depends on him. He could have the best community program in the Nation, but if his teachers are not teaching as well as they might and his students are not learning, then the entire point is lost. The setting, the materials, the equipment, the personnel, and the atmosphere must all be the best that the principal can provide within the realistic limitations of time, budget, and space.

Given the magnitude and complexity of environmental effects on reading, it is possible that even a well-conceived, well-planned, well-structured program might fail. But the principal has it within his power to reduce the possibility of failure and to enhance the possibility of success.

A Step-by-Step Approach to Change

The principal today is assuming more responsibility for the instructional integrity of his school, for creating the means whereby children can become effective learners, and for counteracting environmental deficits. But how does he proceed in a logical way? Here are some typical steps in establishing programs in reading:

1. **Survey the Needs Related to Reading**
   What factors in the neighborhood may interfere with the reading performance of some, or even all, of the children? Examples are: poor self-image, lack of language stimulation, non-

[3] Henry Brickell, "State Organization for Educational Change," *Innovation in Education*, edited by Matthew B. Miles, Bureau of Publications, Teachers College, Columbia University, New York, 1964, p. 503.

standard dialect, and negative attitude toward school and authority. Use study committees, questionnaires, and school records to determine these factors.

2. **Assess Resources**
   What people, facilities, money, and procedures can you use to act on the needs? Examples are: interested teachers and community groups, temporary buildings, contingency funds and Federal grants, and participation in pilot programs.

3. **Consider Possible Solutions—Programs**
   What do research, demonstration programs, or commonsense suggest as ways that will ease the reading problems associated with the environment? Examples are: ungraded classes, home-school teachers, family library programs, tutors, directed field trips, stimulating materials.

4. **Include the Community in Planning and in Execution**
   What groups or individuals should help solve some of the reading problems? Examples are: PTA, local business associations, political pressure groups, professional associations, and interested parents. These people are important not only for generating good will, but also for selling the programs to the community and for finding resources to operate the proposed programs.

5. **Set Specific Objectives**
   What should the children (or adults) be able to do as a result of your programs? For example, with a home-school coordinator program, the child and the parent should be able to conduct a simple reading and comprehension exercise after a visit from the coordinator. (Establishing specific objectives becomes important in "selling" the program to others and in evaluating its effectiveness.)

6. **Clarify Operational Procedures**
   Who are the people with responsibility and what are the rules for the programs? For example, publicize the leader of the program and the guidelines for its operation. A necessary condition is that the principal must give the program leader freedom to operate. Innovative programs, like innovative teachers, must be free to make mistakes or it is unlikely that anything exciting can happen.

7. **Submit a Proposal**
   If the program needs central approval for any reason, write a proposal that describes the first six steps and gives a budget.

8. **Evaluate the Program**
   Are the procedures being carried out? Have the objectives been realized to some degree? Be willing to evaluate in terms of the response of the teaching staff, the pupils, and the local community, and use some format measures of achievement.

Cautions and Alternatives

No one program can act as a solution to all reading problems or to reading problems that stem from the environment. Despite the millions of dollars that have gone into research and program development for overcoming environmental obstacles to learning, there are still no simple solutions. The wise principal, therefore, initiates as many thrusts against the problem as he can and encourages his staff to do the same. And, as each school year ends, he has to decide what is worth continuing, what needs changing, and what has to be abandoned.

The principal can initiate programs that focus on a liaison between the school and the home or the neighborhood. His responsibility then is to see that the parents, teachers, pupils, and related school personnel get together to discuss satisfactory learning experiences and habits for the children. If he decides to set up an enrichment program to broaden the experiences of the children and to prepare them to read the content of their books, he may want to inform and make use of parents and neighborhoods to help supervise the field trips or the social gatherings that become part of the enrichment experiences, and, of course, create working groups among the parents and community and teachers and their aides. Any kind of tutorial program that attempts to stimulate individual children by giving them a chance to perform for an individual tutor not only demands a supply of tutors but also an organization for handling the meeting of the student and the tutor and facilities and materials for them to work with. Not infrequently, volunteers from the Parent-Teachers Association will man a library or will become library assistants and take books from the library to the classrooms where they may also be employed to teach some stories to the children.

Language development, especially for the disadvantaged children, has been identified as a valuable and sometimes essential goal. The use of tape recordings and readings, along with correlated discussions, demands the necessary equipment for the children to listen and respond to correct language patterns. It also demands that a curriculum be written. Tapes and records must be purchased so that the curriculum can be recorded and the children can learn more readily. Any attempt at nongraded classes at the primary and intermediate level, or at any level, requires considerable effort on the part of the principal to get his teachers prepared for this task and to bring in appropriate outside speakers for ideas and workshops. It is also necessary to inform the community and the children of the advantages of the program, pointing out the emphasis on the individual which enables him to receive a greater sense of self-esteem. This comes through elimination of unfair competition or unfair comparisons which can result when classes are grouped according to grades or a single age year.

Probably the greatest error made by principals and administrators is the lack of specific objectives in setting up and developing a program to improve reading. Certainly it is not enough simply to establish as an objective "the improvement of reading" or the "raising of a reading performance score on a standardized test." The objectives of a program should be related to improving self-image or motivation, if that seems to be causing poor performance in reading. Other objectives should include providing more opportunity to interact with an adult or broadcasting experiences to prepare them to understand and discuss concepts that appear in their readers. Furthermore, objectives should be written in terms of the kinds of performance expected from the children after they have gone through the program. Probably the second most frequent fault in establishing new reading programs is the lack of support. It is a fairly simple task to give a body of teachers the freedom to engage in a new program or activity, but that new program will demand materials, inservice training, facilities, and perhaps administrative guidance and encouragement before it can operate efficiently and effectively.

Somehow the school and the environment must be linked with programs that will help children learn to read. A simple worksheet similar to the one presented below may help the principal and his reading teachers to decide how to proceed in their school.

Program Work Sheet

Needs and objectives	*Possible programs*	*Personnel*	*Facilities*
Adult contact	Tutorial	Paid housewives	Rooms
		Volunteer college students	
Common experiences	Enrichment		
Poor vocabulary	Listening posts		
Self-image	Ungraded		
Motivation	Parental involvement		

Starting a School Reading Program

The following steps are suggested for initiating a school reading program:

Steps	*Purpose*	*Uses*
1. All-pupil survey Reading achievement tests	Points out children who need help of some kind	Screening device Show need for remedial help
2. Capacity measure Intelligence tests	Shows ability of individual students	Screening devices Establish priorities for remediation
3. Specific diagnostic testing Diagnostic reading test	Shows strengths and weaknesses of disabled readers	Basic for remedial instruction Establish priorities for remediation

The Principal's Responsibility

Increasingly, the principal is spoken of as the chief instructional officer of his school. This implies that he has the responsibility and the authority to make instruction viable or to let it wither and wane. School administrators these days have no easy task. Not only are parents and community representatives becoming more vociferous in their demand for improved instruction, but teachers are also clamoring for better working conditions and better pay. For that reason, the principal may seek ways of promoting instruc-

tional excellence that do not require his constant attention and supervision. He may consider a consulting teacher as a liaison to visit classrooms and encourage reading improvement, working with the teachers to develop better instructional programs for reading improvement.

Environmental causes and locally sponsored programs to overcome environment are not the only reading program considerations. Naturally, the principal has a broad view of reading instruction and knows the routine for getting diagnoses from classroom teachers, from remedial reading teachers, and from clinics. Yet no one is in a better position to know about the local environment than the school principal. Therefore, he has the responsibility of finding ways to overcome environmental interference with good performance in reading.

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ESTABLISHING CENTRAL READING CLINICS—THE ADMINISTRATOR'S ROLE

PRIMARY LEARNING DIFFICULTIES

Children Who Do Not Read

There are children who do not learn to read, even though they have average or above average intelligence. The validity of the problem was established by an English school doctor as early as 1896 (Kolson and Kaluger, 1963, p. 17). Extensive research since then—in England, Denmark, Germany, and the United States—has shown the learning problems of these children to be of such a special nature that they can respond neither to classroom instruction nor to the usual corrective techniques (Goldberg, 1959; Hermann, 1959; Orton, 1925).

If specialized help, often on a one-to-one basis, is not provided, these children are usually condemned to lives of mounting frustration, their natural talents locked within them, the key to knowledge lying always just outside their grasp (Ellingson, 1967, p. 32). The recurring failure to reach them by the usual methods has turned more and more school systems to diagnostic clinics, for only here can children with such severe problems be offered the help they need.

Over the years, most clinicians and remedial teachers have found that remedial readers fall into two groups: those who can benefit from corrective instruction in the classroom or a small group, despite having a cluster of educational, motivational, and psychological problems coupled with possible visual or auditory impairment—and those who cannot (Kolson and Kaluger, 1963). The latter have severe reading disabilities, and they are the children who are discussed here as needing specialized clinical assistance.

Into whose province do severe cases fall? The school must play a larger role in diagnosis and treatment, for the problems are so unique that even enlightened parents cannot cope with them. Even where private corrective therapy is available, it is often prohibitively expensive. Temple University Laboratory School, Philadelphia, Pennsylvania, for example, charges $1,200 for a semester of therapy.

So there is, in fact, little help for most children with severe reading disabilities except through carefully planned school-connected programs, programs which must be instituted by top-level school administrators. They alone have the overall control, influence, and manipulative prerogatives to establish the kind of service required for this specialized problem. The administrator must determine the extent of severe reading disability in his district, what type service best fits his school system's needs, and what personnel and financial assistance he must have to provide that service.

Characteristics of Severely Disabled Readers

The population in question includes from 1 to 5 percent of the school system, depending on the nature of the school district (Strang, 1968, p. 2). Most seriously disabled readers have little self-confidence. They have seen their classmates learn readily what they fail to learn. They have come to believe that their own stupidity is holding them back. Moreover, they have been told, directly or indirectly, by uninformed parents and teachers that they are simply lazy or stubborn and that a little more effort would achieve reading ability in no time (Kolson and Kaluger, 1963, p. 4). Some tend to believe this and may conclude that it is impossible for them to learn to read (Strang, 1968, p. 70).

Severe reading disabilities are deep-seated. They are often described by such imposing—and often imprecisely used—terms as *minimal brain damage, dyslexia,* and *perceptual handicap.* These disabilities are not related to low intelligence, for children with severe reading disabilities are often above average in intelligence. Such eminent scientists as Niels Bohr, Thomas Edison, and Albert Einstein are believed to have had severe reading difficulties.

Some of the labels attached to people with severe reading problems may lead teachers and parents to think that there is a specific cause and, therefore, a direct remedy, as with a bacterial infection which can be treated with penicillin. Such cause and cure relationship does not exist. Each case of severe reading disability requires an individual approach. There is no one single problem, nor a single approach to treatment.

Children with severe reading difficulties usually have a syndrome of problems. One widely used description of a syndrome lists five major symptoms, including inability to recognize letters and words, difficulties in the visual and motor memory of letter shapes, difficulties in writing letters, difficulties in distinguishing right from left, and difficulties in

placing digits serially to form a number (Kolson and Kaluger, 1963, p. 30), "Doc, I've got it up here," one child said, "I just can't get it down my arm."

No general description can accurately fit any single child with severe reading difficulties, save the observation that seven out of ten times it is a boy. He can have all or any of a combination of physical, emotional, neurological, and instructional problems.

Visual Perception Problems

Visual perception problems generally fall into three categories: (1) difficulty in distinguishing between separate objects, (2) difficulty in recognizing parts of a whole, and (3) difficulty in synthesizing or combining parts to form a whole. Children with perceptual problems may, for instance, perceive only the initial letters of a word, thus confusing *horse* with *house.* The problem may be in distinguishing similar letters, so that *b* appears the same as *d* or *u* the same as *v.* Children tend to reverse letters, writing *brid* for *bird,* or reverse words and even phrases. They may regularly omit letters from words or substitute one simple word for another. They usually have difficulty in distinguishing figures from their background. They may exhibit mirror writing (Kolson and Kaluger, 1963, pp. 30-32).

Psychomotor Disturbances

Children with psychomotor disturbances may have confused directionality and poor left-right orientation, a distorted idea of their own position in space, and trouble making appropriate adjustment in body position, for example, when told to touch the left knee with the right hand (Strang, 1968, pp. 51-52). They show poor motor coordination and poor drawing and copying ability.

Auditory Perceptions and Speech Problems

The child who has a deficiency in auditory perception may have difficulty in distinguishing between similar sounds, such as *p* and *b* or *g* and *v,* as well as in blending sounds together or in matching sounds. His speech development, as a consequence, is slow.

Problems of Memory and Association

Either visual or auditory memory may be deficient, so that children whith these problems will have trouble recalling the image of a letter or remembering its sound. In writing the letter *z*, for instance, they must depend on rote memory of the three directions which the line forming this letter takes, rather than a mental picture of the letter (Kolson and Kaluger, 1963, p. 31). In writing *heavy,* they may drop the first vowel sound and attempt to write only the three letters *h-v-y,* and in the motion of writing, blend the three together so that they come out *hy* (Kolson and Kaluger, 1963, p. 32). Their problems of association center on difficulties with the concepts of time, size, number, and spatial direction.

Emotional Problems

Children with severe reading disabilities are subject to tension, anxiety, and frustration. Their attention span is often short, and they may find it difficult to work independently. Many are easily distracted. The emotional problems may not have caused the reading difficulties but, instead, have stemmed from them. Whether first or last, they have to be dealt with.

The Dimensions of the Problem

Successful treatment of severe reading problems depends not only on an individualized program, but also on a program that diagnoses various other aspects of the child. Building up the ego is as important as diagnosing specific strengths and weaknesses in tailoring a suitable program for each child (Kolson and Kaluger, 1963, p. 42). Obviously, a strictly look-say approach is as inappropriate for the child with deficiencies in visual perception as a strictly phonics approach is for the child with problems in auditory perception. To overcome visual perception deficiencies, visual training exercises may include eye muscle training—following a bouncing light from left to right—or practice in depth perception—concentrating on different colored posts placed at various distances from the viewer. Children with visual-motor disabilities may be given coordination exercises—practice on a walking board or tracing grooves in templates. The training will depend upon the specific needs of the child. It should be noted here that the relationship between visual-motor disabilities and teaching reading is based on correlation studies which cannot impute a cause-effect relationship. Some authorities question the wisdom of any kind of *mass* emphasis on visual-motor coordination activities as a treatment for reading disabilities. Usually the treatment, as well as the diagnosis, must be on a one-to-one basis, at least in the beginning. There is no

point in minimizing the time involved. It may well be years. For the administrator that means a very low teacher-pupil ratio—one that takes a very high per-pupil cost.

While the number of such severely disabled readers has often been exaggerated—some estimates range to as high as 40 percent of the school population—those who clearly need clinical treatment have been conservatively estimated at 1 to 5 percent (Strang, 1968, p. 2). Even that estimate, however, is enough to cause widespread concern on the part of school authorities. In a city the size of Detroit, for instance, with some 300,000 children in the public schools, it means that 15,000 children probably need some kind of clinical help. Even in a system the size of that in Kettering, Ohio, with only 15,000 students, there may be 750 who need clinical help.

This situation poses agonizing problems to top-level school administrators who fully recognize their obligation to all children entrusted to their care, but at the same time are acutely aware of the practical limitations of time, space, personnel, and money. Yet many systems are moving ahead despite the practical difficulties and are showing promising results. Some of these programs are described in the next section.

CURRENT APPROACHES TO THE PROBLEM

The University Clinic

The university clinic may often serve the school administrator as a model. Generally it offers the best available archetype in the diagnosis and treatment of severe reading disabilities. Because it does not face the pressing demands or sheer numbers of a public school system, it can deal with far fewer cases and can offer more comprehensive diagnostic and treatment services. In addition, the university clinic contributes valuable research to the field, provides consultation service to the public schools, and trains diagnostic clinicians to serve in the public schools. (See attached floor plan for a typical university clinic on page 29.) Temple University's reading clinic and laboratory school in Philadelphia is one example.

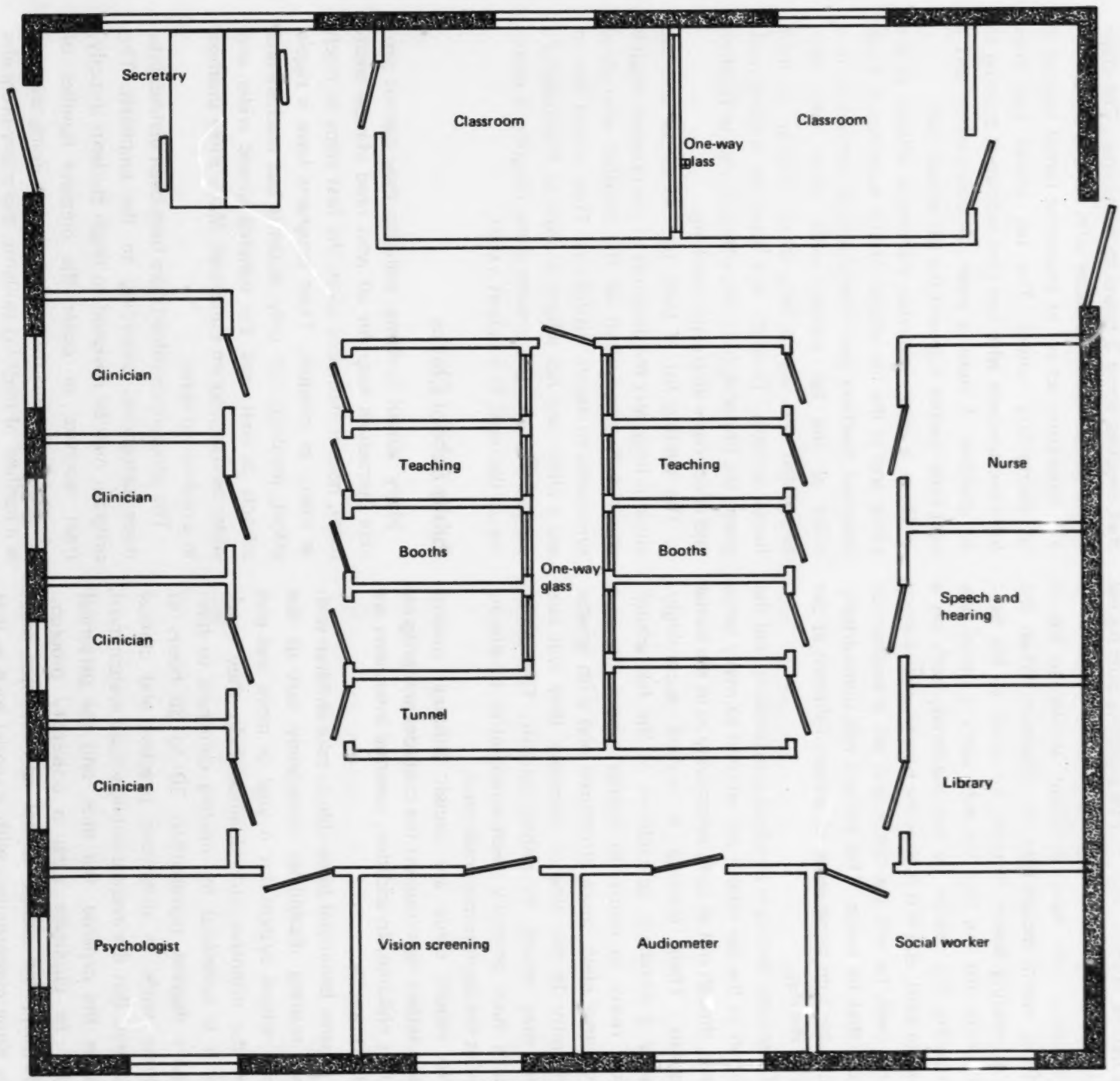
Temple's clinic diagnoses the reading and learning difficulties of any child referred to it. The battery of tests usually takes 2 days to complete, covering a wide range of physical, social, psychological, mental and intellectual factors. Besides screening for visual, auditory, neurological, and speech impairments, the tests measure:

- intellectual functioning (IQ)
- word recognition skills (sight vocabulary, word perception, oral and silent reading skills, skimming ability)
- spelling
- auditory and visual discrimination
- learning aptitude (memory span, attention span, language and cognitive development)
- lateral and perceptual motor coordination
- social and emotional adjustment

An informal reading inventory and a standardized achievement test are also given. From an interview with the parents, a developmental case history—including prenatal care, the number of other children in the family, family circumstances, and school history—is prepared. Psychiatrists, social workers, and neurologists are called upon when necessary. The results are written up in a form that parents can understand, and recommendations are made which can be carried out by parents, tutors, or classroom or remedial teachers, as the case may be. The clinic tests nearly 900 children a year, and those with severe reading disabilities may be recommended to the university's laboratory school.

The lab school occupies two buildings, former barracks, several miles distant from the university. A tuition of $1,200 a semester is charged, and children stay an average of 2 years. Some have gone on to college, others to vocational schools. Approximately 80 children are enrolled, ranging in age from 7 to 20. The staff includes 11 full-time teachers, 10 part-time teachers, and a part-time psychologist. The lab school is nongraded, and the children are grouped and regrouped during the day in sections ranging from three to nine. Two staff members attend every class, and one or more graduate students, working toward their master's degrees, are also in attendance. The children come from neighboring States and from cities as far distant as Denver.

Each child carries with him a clipboard to which is attached his own day's assignments. Opposite each assignment is space for the teacher's frank comments. By the end of the week, the daily log charts a record of his progress. The focus is mainly on the language arts—listening, speaking, reading, and writing—but mathematics, history, geography, science, and related areas are included at appropriate stages. The avenues to learning are not only visual and aural, but tactile



UNIVERSITY CLINIC

(touch) and kinesthetic (body movement) as well. The child is started at his present reading level and moved along at a pace he can handle.

For a certain period in the morning, for example, a boy may be working alone on words he missed the day before. No bell rings, but he suddenly puts his list aside and joins a reading group forming in the room. This group will have problems similar to his in spelling, word recognition, or whatever. When the group reading lesson is over, he turns to his next assignment for the day. He may carry a metal box containing the words he has mastered, each on a separate card, and if it is time for him to write a story of his own, he will use them and ask a teacher for others that he needs. This pattern will undoubtedly insure for him some sense of accomplishment at the end of the day.

Diagnostic testing is an ongoing procedure, and the children in the lab school are retested formally twice a year, though not as comprehensively as in the initial diagnosis. Their training is revised accordingly. Usually a dozen or so children in the lab school, almost ready to return to regular school, are in a transitional class, more structured and with greater conformity to the type of classwork they will face when they return to public schools. The public schools have generally been cooperative in placing them at the appropriate grade level.

No report cards are issued, although parents receive letters reporting on the attitudes and progress of their children. In addition, parental interviews are held at intervals.

It seems beneficial to be able to take children with severe reading disabilities completely out of the regular school system for a year or more and give them the intensive individualized help they need. Also it is beneficial for reading clinicians to have master's degrees representing 30 to 38 hours of graduate work in diagnostic practice and clinical treatment. But the average public school system must consider the expense, the time, and the personnel needed to duplicate such a university program. Frequently, the public school administrator must make some compromises with a model such as that offered by Temple University. But a model serves primarily to provide ideas and need not be imitated slavishly.

The Philadelphia public school system, for example, which surrounds Temple University, uses some elements similar to the Temple University clinic, with adaptations that suit its needs and finances. Philadelphia's diagnostic clinic has a staff of two directors with doctor's degrees, a secretary, and five teachers in a treatment center. The directors are charged with many duties in addition to testing, including inservice training experiences for reading teachers. About four children a week receive the diagnostic test battery that requires some 3 hours to administer. The clinic offers remediation for those with serious disabilities in a laboratory school or treatment center located in an elementary school. The lab school has three full-time teachers who can give individual training to 43 children 1 hour a week. A coordinator and a part-time teacher augment the lab school staff.

Once a week, inservice training is offered at the clinic and at the lab school. Under supervision, these inservice teachers give individualized instruction to a child at the lab school, while those who have completed the course help other children in their home schools. Through this inservice training program, the Philadelphia clinic offers service to children and encourages diagnostic teaching.

The waiting list at both the lab school and the clinic is long, and the directors of the program readily admit they cannot test all the children who show symptoms of severe disabilities. They would like to see a clinic and lab school in each of Philadelphia's subdistricts, and the present clinic program is pointing up the need. It is indeed a start.

Public School Clinics

Many school systems, realizing they cannot provide immediate help for all who need clinical treatment, have nonetheless taken the first steps to reach as many as possible. Their programs have a ripple effect, involving not only students but teachers and schools as well, and the benefits spread wider and wider as the program continues. Many show promise in a number of ways.

The programs outlined here have been divided into three categories, according to the emphasis. The program may be designed to reach students directly, train teachers, or cover the greatest number of schools. Such aims do overlap, since training teachers is a method of reaching students, and many programs place equal emphasis on all three goals.

Clinics Emphasizing Student Assistance

Columbus, Georgia—The reading clinic at Columbus, Georgia, takes a thousand children from the first through the twelfth grade for training two or three

times a week. The staff numbers 29 professionals and paraprofessional persons, and each teacher has five daily classes of eight children. Only children who are 2 years or more behind grade level (5,000 are in Columbus' Title I schools) are admitted, after an hour's diagnostic testing. The emphasis of the program is on word analysis, comprehension, and reading rate. The Columbus program reaches out into the community as well, with an evening adult education program for public employees, such as post office workers. This type of clinic aims at teaching groups of children and evidently cannot engage in the in-depth diagnosis and individual treatment described in the Temple University model.

Buffalo, New York—Designed for children from the second through the sixth grades, the Buffalo, New York, program buses children to the reading center daily for sessions from a half-hour to an hour. Clinicians work with the children in small groups. In addition, five teachers are given a year's inservice training in remedial reading at the center. They are completely freed from their classes and paid a regular salary for the year while learning and working at the center.

Robbinsdale, Minnesota—Some school systems narrow the grade range in order to cut off seepage. In Robbinsdale, Minnesota, for example, three reading centers have been established to serve 180 students with severe reading disabilities in grades two through four. Students from 16 public and four private elementary schools are transported to the centers for daily 90-minute sessions in groups of four to eight. The program involves a director, 12 remedial reading teachers, and a special services staff.

St. Louis, Missouri—St. Louis, Missouri, which began reading clinics over two decades ago and has expanded their number to seven, not only treats the children but trains classroom teachers. Each St. Louis clinic has a staff of four teachers and a secretary. A school physician and nurse are assigned to the clinics at regularly appointed times to administer the physical examinations. The school social worker lends a hand when needed.

Each clinic consists of a large, cheerful, book-lined central room with three or four small teaching rooms and an office. A wide variety of books and teaching materials is available as well as all necessary equipment for diagnosis and specific remediation.

After diagnostic testing, the clinic provides treatment for those with severe disabilities and follows up after the treatment is completed. Periodic followup reports on clinic cases have had an excellent effect on teachers and administrators as well as the child, giving him the advantage of continuing interest. Class periods are usually 45 minutes, an hour, or an hour and a quarter. An effort is made to schedule pupils when they can be most readily excused from classroom instruction. Depending on the extent of his disability, the child is either treated on a one-to-one basis by a skilled remedial reading teacher or in a group of three or four other pupils.

Clinics Emphasizing Increased School Coverage

DeKalb County, Georgia—The reading clinic of DeKalb County, Georgia, works with children and also trains remedial reading teachers. It hopes to establish a "satellite clinic" with a remedial reading teacher in every one of the county's schools. Three years after the program began (in 1965), it had trained enough remedial teachers to set up "satellite clinics" in 46 schools, reaching almost half of the county's hundred-odd schools. Its pace has a slight edge on the county's growth, which sees 13 new schools a year.

The central clinic diagnoses children referred there and treats those with the more severe problems. Two-and-a-half years after the program began, it had tested 525 children and treated 121.

Children are referred to the clinic by their teachers, through the school principal. The clinic accepts referrals who are behind grade level but not mentally retarded. How far behind they are depends on the grade level. First graders need be only 5 months behind, sixth graders 2 years or more below grade level.

The child referred to the DeKalb clinic receives 4 hours of testing to determine his specific reading difficulties. An hour's psychological test usually has already been given him at his home school. The diagnostic tests cover a wide range of factors; and the parents, who bring the child to the center, are also interviewed. After his difficulties have been pinpointed, the child may be returned to the classroom (with suggestions for help), referred to the satellite clinic in his school (if there is one), referred to other specialized clinics (for the emotionally disturbed, mentally retarded, or child guidance), recommended for a Learning Disabilities Class (which takes children with neurological and pathological problems for fullday across-the-board treatment), or accepted at the center for treatment.

The clinic treats 25 to 35 children a quarter. They come for an hour on staggered days, alternating 3 days one week and 2 the next. Tutored on a one-to-one basis, they remain in the program until they reach their potential or until it is felt they have been set apart too long. A junior high school student reading at the second-grade level was brought up to the seventh-grade level after 50 hours in the center. Another student, reading at the preprimer level, was reading well enough to get his driver's license after 2½ years.

In the satellite clinics, children are taken in groups of five or fewer, again on staggered schedules: 3 hours, one week; 2 the next. The grouping, as far as possible, is arranged according to the children's reading levels and reading disabilities. By 1967, nearly 1,000 children were receiving remedial treatment in the schools this way.

The remedial reading teachers in the satellite clinics are trained in the center. More than 50 teachers were trained in the center's first 2½ years. The training sessions last 9 weeks, during which the teachers are released full time from school. They are recommended by their principals and, upon return, are given time aside from their remedial reading classes to act as reading consultants and resource people to the other teachers in their schools and to hold interviews with parents. Satellite clinics in the Title I schools each receive Federal funds for materials and equipment.

The clinic trains 7 to 10 teachers every 9-week session. The course is child-centered rather than textbook-centered, offering practical experience in diagnostic, corrective, and remedial teaching. Each trainee works with one child, under supervision. After completing the program, he receives an hour's inservice training every quarter. The director of the clinic maintains continuing liaison with him as well.

In a school system of 80,000 children, such as DeKalb's, it was obvious that a reading clinic was needed. The county school superintendent and supervisor of instruction had been planning for a clinic before a Title I grant set them on their way. In selecting an initial staff, a principal and a classroom teacher were urged to get their doctorates at the University of Georgia. One became the director of the clinic, the second succeeding him a few years later. Together they trained several clinicians and drew a few more from nearby universities. This was the nucleus of the program.

The clinic is located in the basement of the old Clarkston High School. Besides offices for members of the staff, there is a central meeting room, a library with 10,000 books for use in the clinic or for lending to schools, and four cubicles with bookshelves and blackboards, each monitored by a closed-circuit television system for inservice training and supervision. In addition, there is an observation room with a one-way window. In addition to the director, there are four full-time clinicians on the staff who either have or are working toward their master's degrees. They train the teachers, supervise their work with children, and teach children in the center.

Detroit, Michigan—Detroit's clinic program is aimed at schoolwide coverage in a somewhat different way. Portable buildings are set up at school sites, becoming a center for clusters of schools. In 1967, Detroit had three such Communication Skills Centers, each serving 15 elementary schools. Each of the skills centers is staffed by a diagnostician, a psychologist, a social therapist, and six reading teachers. Children are referred by the feeder schools, through their classroom teachers and principals. On the basis of an informal reading inventory and past school record, children at the center are placed in small groups of five or six. Attendance is for an hour a day, 4 days a week. After beginning instruction, a child may be sent for additional diagnosis to the diagnostician, the psychologist, or the social therapist, whichever is needed. Otherwise, he remains with the reading teacher. Each center buses in 100 children a day.

Four days are given to instruction and the fifth is devoted to inservice training and planning. Often discussions of individual cases take place at staff meetings which are held at the lunch hour in order to include the principal and teacher from the home school.

Psychological testing is not the primary function of the staff psychologist. He acts more as a researcher in the field of reading problems, and often helps the teachers to formulate specific techniques for overcoming reading difficulties which they encounter. The social therapist's role at the center is also fluid. She establishes liaison with parents of children in the center, visiting them in their homes and alleviating any fears they may have when their children are singled out for special service. She also focuses on mental health, working in cooperation with the State Department of Mental Health. The center's diagnostician acts as the overall director, coordinating the program with the schools.

Mobile Clinics

Other school systems use mobile vans rather than portable buildings for various aspects of a clinic program.

Palm Beach County, Florida, uses three trailers, 12 by 45 feet, as remedial clinics, sending them to qualifying schools for one semester. Each trailer is staffed with a reading clinician, four reading teachers, and a secretary-aide. The reading clinician does extensive testing, and the four teachers carry out the instructional programs for seriously disabled readers. The children come for an hour a day and are handled on a one-to-one basis or in small groups of up to four. The program reaches children from the second to the fourth grade (See floor plan of a Trailer Clinic on page 34.)

In a program involving 49 schools in *Wisconsin,* a mobile unit is driven to a participating school and remains there until diagnostic, physical, and psychological tests have been given to all children selected. The program was planned by a committee of school administrators, both public and parochial, school board members, and specialists from Wisconsin State University and the State Department of Public Instruction.

Headquarters for the program are located at the county courthouse in Appleton, and the staff includes 15 reading teachers, a project director, two psychometrists, a technician, a psychologist, and a social worker. After diagnosis in the mobile unit, small groups of children whose IQ's range from 80 to 100 and whose reading is below grade level (1 year or or more in the third and fourth grades, 2 years or more in fifth through tenth), are taken on by the reading teachers, who visit them in their own schools for 150 minutes a week. The teachers work with no more than four in a group and undertake a teaching load of no more than 50. The children stay in the program until they are reading at either grade level or at their expectancy level.

In *Downey, California,* a mobile trailer, fully outfitted as a diagnostic reading center, goes to the parochial schools in the district. An unusual feature of this program is that a substitute teacher travels with the van and takes over for the regular classroom teacher while a child is being tested. Thus the regular teacher can both observe the testing and supply useful background information to the clinicians. After the child is tested, a reading specialist demonstrates some of the multimedia, multilevel techniques for working with small groups of six to eight children, and the classroom teacher has an opportunity to work with the materials under the supervision of an expert and to borrow those materials appropriate for her problem cases.

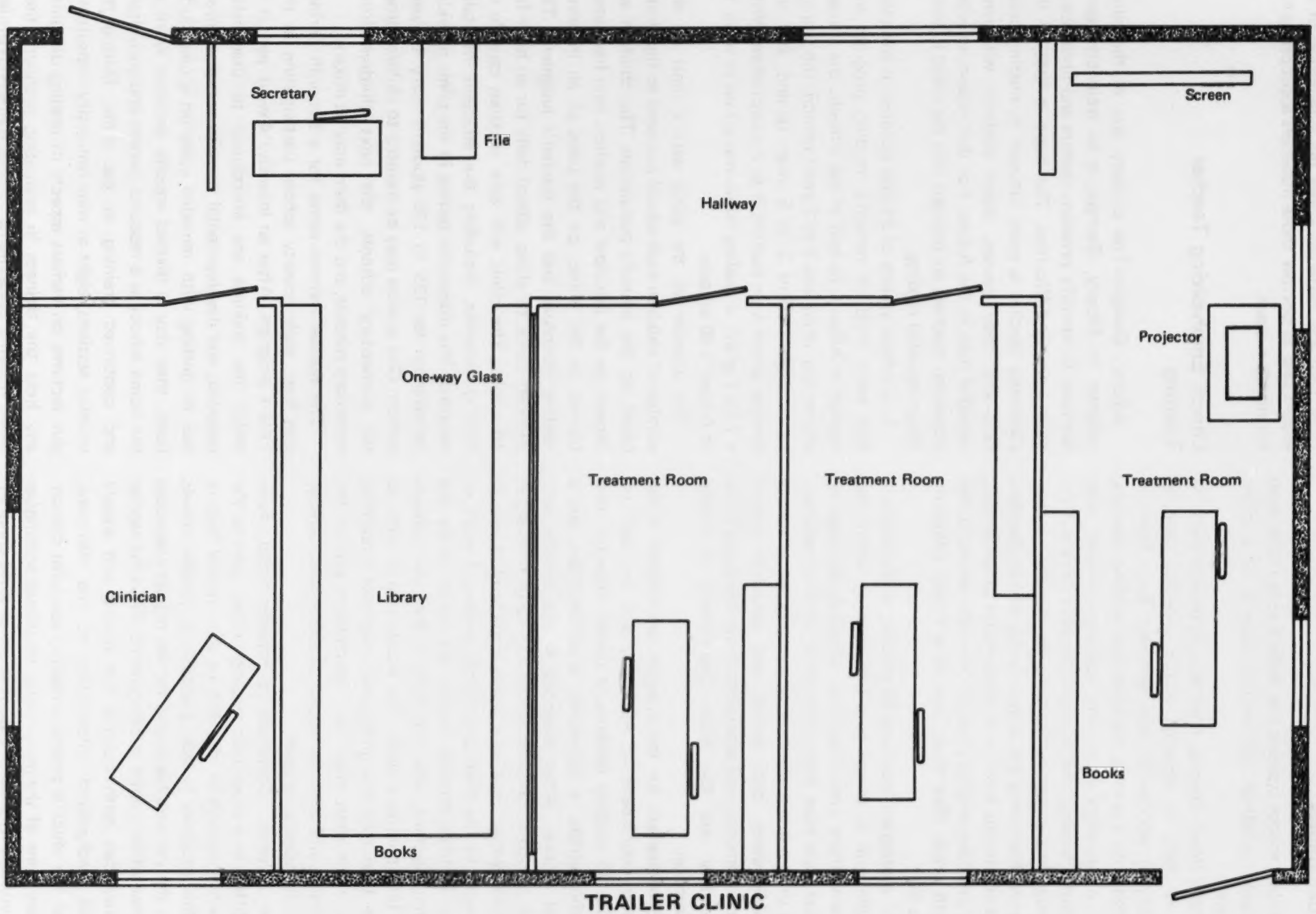
Clinics Emphasizing Teacher Training

Albany, Georgia—The primary aim of the clinic program in Albany, Georgia, is to train classroom teachers to identify problem readers and understand their learning difficulties. The hope is that, if the classroom teacher is more attuned to reading problems and their causes, fewer students will need remedial help in the future. For that reason, selected classroom teachers are brought into the clinic to learn about remedial reading.

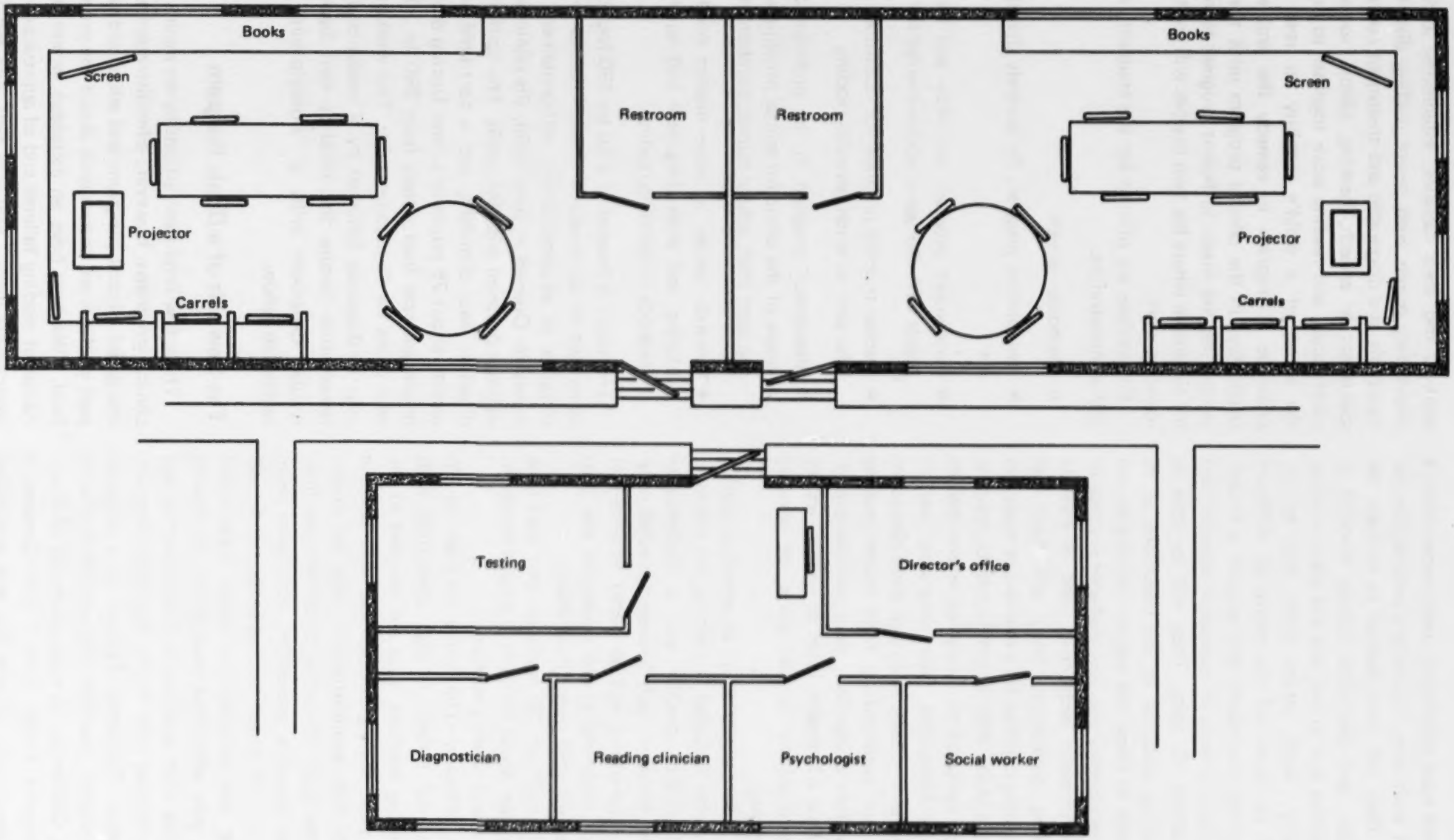
In a school system of 21,000 children, it was clear that some kind of remedial reading program was needed in Albany. In half of the schools, the average elementary child was 2 to 3 years behind, the average junior high student 3 to 5 years behind, and the average senior high student 3 to 7 years behind. With a Title I grant, a reading clinic was set up to serve 18 of Albany's 46 schools.

The director of the clinic sets a limit on the number of children each school can send to the clinic, based on the school's population. The children are chosen, by the principal and teachers who have been trained in the clinic, on the basis of an informal reading inventory and the teacher's judgment. The children come to clinic school daily for an hour for 10 weeks. The clinic will take children capable of making progress, including the educable mentally retarded. The diagnostic testing in the clinic provides remediation for 125 to 135 students every 10-week session. One session may be devoted to children from the elementary schools, the next children from secondary schools, and the third may be mixed.

The teacher-trainees come for a 6-month period, one from each poverty school participating in the Title I program. After an intensive 4-week period in which the trainees are introduced to diagnostic, remedial, and developmental theories and given practice in dealing with remedial cases on a case-study basis, their day is divided equally between work at the home school as a resource person and consultant and continued training at the clinic. During the training sessions, eight or nine university consultants give lectures on various aspects of reading disability and help the trainees in evaluating problems they meet. Reading assignments for the trainees in professional books and magazines are extensive. When they



TRAILER CLINIC



COMMUNICATION SKILLS CENTER

finish, they will have completed, under supervision, a case study of their own, including a prescription for remediation. They will have learned to evaluate the physical, social, and emotional factors involved in reading disabilities and to test oral and silent reading, listening ability, work attack skills, and so on. Trainees will be aware of the merits of different diagnostic testing procedures and acquire a knowledge of the characteristics of measure in standardized and individualized IQ tests. They will be able to recognize reading readiness in the classroom, at all levels, and come to know the various techniques and materials, from phonics and new alphabet systems to tactile and kinesthetic techniques used in treating specific reading disabilities. They will have had practice in treating children on a one-to-one basis and in small groups. Upon their return to school, trainees will be better equipped to recognize severe reading problems, to individualize their programs, and to meet their students' needs. Although these classroom teachers are not expected to treat severe reading disabilities in their classrooms, their training experience in the clinic will enable them to identify and to refer serious problems to the clinic or another appropriate agency.

They do not necessarily return to school as reading teachers. Currently included in training, for instance, are a social studies teacher and a mathematics teacher. Some, however, may become remedial reading teachers. The others will be better informed in treating minor problems in the classroom and thus ward off some potential severe disabilities.

The clinic staff of 30 includes two part-time psychologists, two social workers, a speech therapist, four clinicians, and reading teachers.

St. Louis, Missouri—The clinic program in *St. Louis,* mentioned earlier, is also concerned with classroom reading teachers, who are assigned to the clinic for a year. During this period, they become familiar with test administration, gain an understanding of the cause of reading disabilities and their treatment and possible prevention, and learn more about the nature of severe reading problems. A year in the clinic also provides for these experienced teachers to gain additional perception of reading problems along with training in developmental and corrective techniques used in the classroom program.

Bell Gardens, California—Typical of a program that serves children, teachers, and schools is that in Bell Gardens, California, 15 miles southeast of downtown Los Angeles. Under Title I, Bell Gardens, a low-income community of unskilled and semiskilled workers and their families, established a clinic for elementary pupils with severe reading disabilities. It functions as a diagnostic and treatment center where specialists in speech, hearing, vision, social work, psychology, and reading work together to determine the cause of a child's inability to read and to prescribe a program to remedy the problem. The pupil stays in the clinical program until the staff is assured he has made sufficient progress to return to his classroom where his own teacher will continue the remedial work.

Six services are offered for the students, teachers, and administrators:

- diagnostic service
- remediation program for severely disabled readers
- enrichment program for fifth- and sixth-grade pupils with average or above average IQ
- teacher-training program for classroom teachers who plan to teach remedial reading
- orientation program in the purposes and programs of the clinic for school principals, district top-level staff, school nurses, psychometrists
- research center to serve district needs in exploring and evaluating new and experimental methods of teaching reading

The clinic is housed in a 60 by 180 foot structure composed of six modular interconnected units. The complex is air-conditioned, self-contained, and expandable. Opened in June 1966, the clinic began as a summer program with 60 pupils. The staff includes a director, two clinicians, and a part-time secretary, serving about 75 pupils at a time. During the year the maximum case load ranges from 250 to 300 pupils who come for 45 minutes a day. Two weeks are given over to diagnosis followed by 6 weeks or longer of remediation before the child is sent back to his regular classroom with a "prescription" for his teacher to follow.

The Rewards of a Clinic Program

These few brief descriptions by no means cover all clinical programs; however, administrators who have instigated clinical programs and educators who are a part of them are enthusiastic about the promise they hold. "We now have an increased awareness of the causes of reading failures and of approaches to use in overcoming them," said one. Not only are the clinics

helping individual pupils to overcome their reading difficulties, but reading success has improved pupil attendance and reduced delinquency among pupils who were formerly poor readers or nonreaders. "Even the bus trip to the clinic is important," said one teacher whose disadvantaged students have rarely traveled more than a few blocks from their homes. Educators also note more support of school efforts on the part of parents whose children are now being helped by highly specialized personnel.

Despite the problems of finding space, staff, and money, school administrators who have undertaken to set up clinic programs say the effort is well spent.

SETTING UP A CLINIC PROGRAM

The main responsibility in determining the need for a diagnostic clinic and in establishing a remedial program for children with severe reading disabilities rests with the superintendent of schools and other top-level administrators. This is true because the clinic involves many schools and a major financial commitment.

While it is estimated that 1 to 5 percent of the children in any school population will have learning difficulties serious enough to warrant clinical treatment (Strang, 1968, p. 2), it may be that a small school system will not have a sufficient number of pupils with severe reading disabilities to justify the cost. In that case, it may be possible for several small school districts to join forces to survey the need and establish a clinic. Similarly, a public school system could join the private and parochial schools in the area to establish one.

A clinic is expensive because treatment of severe reading problems often requires a one-to-one relationship with the child or, at best, one teacher for every three or four children. Furthermore, the services either must be taken to the child or the child must be brought to the clinic. The materials involved are also expensive. Per-pupil cost, however, is not the only consideration. The shortage of qualified personnel also makes staffing a difficult problem.

But clinics can more than justify their cost by providing teacher training and consultative services, as well as diagnostic and remediation services, to the schools. Their effect can raise the standards of an entire school system.

Selection and Referral of the Children

Not every poor reader needs clinical treatment; not every child can benefit (Kolson and Kaluger, 1963, p. 16). Although a line must be drawn somewhere, the first rule to follow is, "Be flexible." Experience has shown that the border-line between moderate and severe reading disabilities is sometimes difficult to ascertain and that a recommendation for nonclinical remediation should not be final.

Guidelines must be set, both for those children diagnosed by the clinics and for those treated by the clinics, but they should be used with discretion. For example, intelligence tests are not necessarily reliable guides. A rigid cutoff point based on IQ tests is questionable (Bond and Tinker, 1967, p. 13). IQ scores vary, depending on the test used, and are too often based on reading ability reflecting merely the frustration level rather than the actual ability of a student with a severe reading disability. Moreover, the clinic program can actually raise a child's IQ score (Bond and Tinker, 1967, p. 413), and a rise of even a scant five points can mean the difference between a frustrated life and a useful one if a rigid IQ cutoff is maintained. A slow learner must have the instructional pace and techniques adapted to his slow learning ability. The best diagnostic services attempt to discover learning potential from tests not based entirely on ability to read, such as the Wechsler Intelligence Scale for Children.

In addition, some school systems have found that even the educable mentally retarded profit from being included in clinic programs.

Another criterion that should be evaluated with caution is reading lag or gap, the difference between potential and performance. If the critical lag is set at 2 years for everyone, then no clinical program could start before third grade, which many agree is already too late. Most experts agree that it is as serious to be behind 6 months in the second grade as 2 years in the eighth. *Dekalb County, Georgia,* for example, uses a staggered measure, beginning with a 5-month lag in first grade and rising to 2 years by the sixth. Children who are 2 or more years behind are not necessarily children with severe reading disabilities, but the lag criterion provides an initial, rough screen measure. Increasingly, the focus is coming to rest on younger and younger children. The earlier the problems are identified, the better.

Once standards are set for acceptance of children by the clinic, who should make the referral? Frequently, the classroom teacher does since he is in the

best position to spot problem readers. Usually his referral must come through the principal. If there is a remedial reading teacher or a reading consultant in the school, of course they help determine whether a child should be referred. Referrals from either a reading specialist in the school or the principal are usual patterns. Ordinarily it is also the school's responsibility to inform the parents and prepare them for interviews at the clinic.

Once the diagnostic testing is completed, the clinic must recommend the appropriate treatment. Reading treatment programs are usually divided into three categories: corrective (in class), remedial (special teacher), and clinical. If the reading disability is not too serious or the course prescribed too complex, the clinic may return the child to the school. For example, the clinic may return to the classroom a disabled reader who is performing close to his capacity level with suggestions for appropriate materials and techniques. In another case, the clinic may suggest corrective treatment, either by the classroom teacher or a reading teacher in a remedial reading class. If a child's disabilities are severe, however, and the treatment complicated, he will be taken into the clinic for treatment. (See diagram relating group size to severity of problems and type of correction program on page 39.)

Unfortunately, many children with severe reading difficulties will be found to have concomitant problems, some of which preceded and possibly contributed to, or perhaps stemmed from, the reading disability (Strang, 1968, p. 63). Children with severe emotional disturbances may not be able to benefit from clinical help because their emotional problems interfere with the treatment. The clinic must decide whether they need medical help before treatment can begin or outside help along with the clinic program.

Testing

There are probably no two severe reading disability cases exactly alike; hence, flexibility in testing procedures is a prerequisite for an effective program. Not every child will require every test and not every test is of equal value.

In general, the diagnosis should include not only reading tests, but also tests of the student's general achievement, achievement potential, vision, hearing, speech, personality, and attitudes.

Though the school administrator cannot ordinarily be an expert in diagnosis and testing, he should be aware of some of the limitations of tests. Some tests overestimate the ability of the child and some underestimate it. Some are valid for small children but lose their validity for children in higher grades. An obvious advantage of clinical testing is the use of a cross-discipline interpretation of the tests.

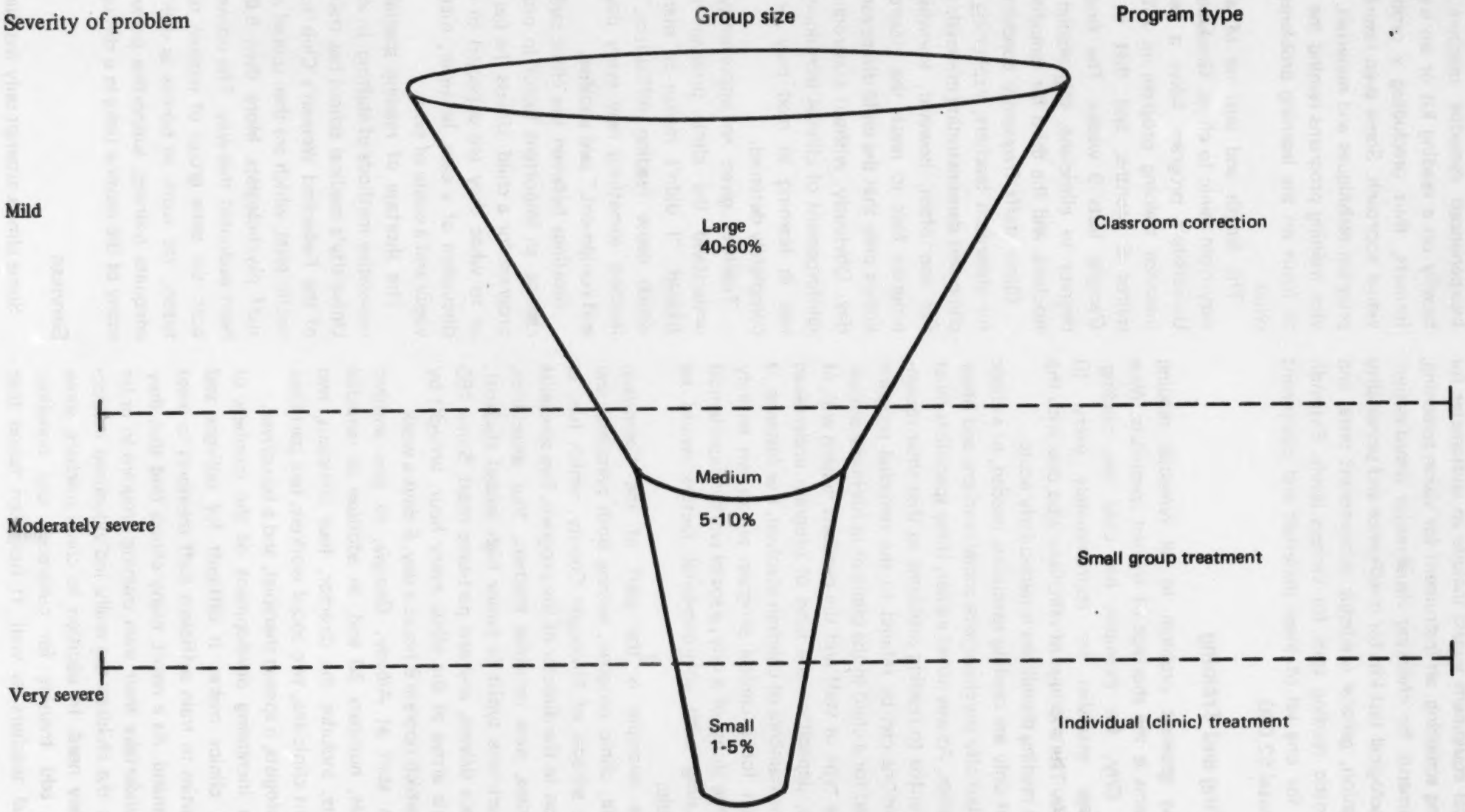
The recommended multidisciplinary approach calls for the services of a variety of persons—social workers, speech therapists, and psychologists, as well as reading experts. Teamwork is essential if their services are to be helpful in planning remedial treatment for individual cases. For example, a diagnosis of "emotional interference" with learning to read does little to indicate techniques that can help a child learn to read. The social worker can offer direction and make visits to the home; the psychologist can recommend a motivational strategy; and the reading clinician can map out a plan for reading skills.

An experienced diagnostician, one who has clinical experience and can exercise discrimination in the administration of tests, must be in charge of the testing program and test interpretation. Test results easily lend themselves to misinterpretation, and highly qualified people are required to evaluate them. Testing usually shows strengths as well as weaknesses, enabling the evaluator to prescribe a program that builds on the child's strengths to overcome his weaknesses.

A diagnostic battery of tests requires 3 to 5 hours of clinic time, and an interview with the parents usually takes place while the first tests are given. The clinician needs the family background information which the parents can supply; and he, in turn, can give them a better understanding of the purpose of the tests. A followup interview is held to discuss the results; and although such work with parents may be time-consuming at the beginning, it enlists their cooperation in the program early. On their cooperation may hang success or failure.

The child's classroom teacher should also be informed of the test results, even when the clinic undertakes the remediation itself. Since most classroom teachers are unfamiliar with individual diagnostic tests and unable to evaluate their results, it is essential to explain the results so the teacher can relate the child's learning abilities and disabilities to the classroom situation.

Clinical testing for severe reading disabilities usually takes place in a central location where the equipment, materials, and clinicians are available. However, more and more school systems are making use of mobile vans to take the diagnostic equipment and clinicians to the schools, particularly in county school systems where schools are widely scattered.


Severity of problem
Group size
Program type
Mild
Large
40-60%
Classroom correction
Medium
5-10%
Moderately severe
Small group treatment
Very severe
Small
1-5%
Individual (clinic) treatment

Typical equipment would include an audiometer for hearing screening, an instrument for vision screening, instruments for checking visual-motor coordination, psychological test kits for intelligence and personality evaluation, general academic achievement tests, and diagnostic reading tests for various levels. Expenditures for one set of these materials and equipment may total $2,000.

Staffing and Training

The greatest problem in all remedial reading programs is the shortage of trained specialists. *New York City,* for example, has only one reading-language specialist for approximately every 10 schools. The shortage of clinicians who deal with the severe reading disabilities is particularly acute.

Not only are reading specialists needed, or a clinic staff, but also psychologists, social workers, and other specialists. As was noted earlier, these specialists must be oriented to reading problems so that their recommendations can be related to the remedial program planned for a child in the clinic or in his home school.

The type of staff and the numbers needed will, of course, depend on the kind of program undertaken and the numbers of children involved. For instance, if children for a clinical program are drawn entirely from the slums of a city, a social worker experienced in dealing with environmental factors would be desirable.

One example is the staff of the *Columbus, Georgia*, clinic program, serving both parochial and public schools of Muscogee County, which has, in addition to the director of the program, five specialist examiners, nine remedial teachers, four secretaries, one part-time typist (a junior high school student), four bus drivers, and one part-time maid. Some 150 students arrive at the clinic every hour, brought by buses which operate 8 hours a day, 5 days a week.

The staff at *Albany, Georgia,* to give another example, numbers 30 and, in addition to remedial teachers, includes the director, four clinicians, two assistant clinicians, two social workers, two part-time psychologists, a speech therapist, and a bus driver.

The increasing development of the numbers of school clinics makes it difficult for colleges and universities to train sufficient staff members to meet the demand. As a result, many clinics find that they must undertake their own training program in order to give the children the really individualized instruction they need. In addition to clinic teachers, some clinics add training for classroom and nonclinic remedial teachers as well. It has been found that inexperienced remedial teachers tend to rely too heavily on a reading kit or on traditional classroom formats, thus precluding a problem-oriented individual approach. Some even resort to developmental program techniques and materials. Clinics with inservice training programs remind the new clinic teacher to focus on the learning problems of the individual child.

The length and purpose of a training program vary from clinic to clinic. Graduates study in Temple University's program takes a year or longer; the inservice training program in *Albany, Georgia*, requires 6 months; and that in *DeKalb County, Georgia,* lasts 9 weeks. The first awards master's degrees to clinicians, the second is for classroom teachers, and the third for remedial reading teachers.

Clinic staffs frequently conduct inservice sessions for classroom teachers, explaining procedures of the clinic and demonstrating materials and methods used. Far too often, however, knowledge of the clinic program fails to reach the classroom teacher, who knows only that the child disappears for an hour each day. Obviously, without classroom cooperation and reinforcement of clinical techniques, the child's progress in learning to read may be inhibited, if not completely deterred.

Teachers given an opportunity to observe and understand the clinic program operation are intrigued. "I didn't realize so many problems exist which cause reading difficulties," said one. "I'm learning something new every day about materials and equipment," said another.

Meetings between the clinic staff and the teacher can be an important factor in providing a rounded program for a child. Unless the participants are clear as to what they are expected to contribute to the discussion of a case, however, such meetings can be vague and a waste of time.

The shortage of reading specialists is leading to innovative methods of staffing. In *Arkansas,* the State University's medical school has trained 100 members of the Federated Women's Club to administer diagnostic tests, which are then scored and interpreted by staff psychologists. More than 6,000 children have been evaluated this way. The university now plans to train the same group of women to become reading tutors, for work in homes as well as schools. With adequate training, supportive personnel can perform many of the routine tasks in a clinical operation.

Services

Some clinics attempt only the diagnosis procedure,

later referring the child, with prescriptive measures, either to other agencies, to the remedial program of the child's school, or to his own classroom. Diagnosis without treatment does little for the child. Once the diagnosis of a reading problem has been made, the child should be provided with appropriate treatment.

Most clinics do offer treatment based on the diagnosis. Individually prescribed clinical treatment is aimed at specific learning disabilities. A number of techniques—visual, auditory, kinesthetic, tactile—may be employed. A child with problems in visual-motor coordination, for example, may engage in a series of exercises, such as making believe he is a puppet or a jack-in-the-box, skipping, hopping, puddle jumping, and tracing forms with his fingers or with a pencil.

A child who has failed to understand the relationship between speech and print may be asked to dictate his own experience stories to the teacher, then learn to read them back from a typewritten copy. A clinic, however, will not only teach a child the skills to advance his reading and learning ability, but will also try to improve his attitude toward himself and his reading. A wide selection of materials must be available to stimulate reading interest.

As with diagnostic techniques, it is not essential for the school administrator to be an expert on all of the many effective materials and methods. That is the function of the clinic director. However, it is only reasonable to expect the superintendent to be informed of the general approaches used in his clinic and to encourage evaluation of specific techniques so that he is able to effectively modify if modifications are needed.

Just as there are wide variations in materials and methods used, so are there diversities in the amount of time spent by the children in the clinics. Good results have been achieved with a child attending the clinic 3 times a week. One study showed no significant differences between effects of remedial assistance offered once a week and that offered daily. What is probably the key is the consistency of practice on a skill, whether in the clinic, the school, or the homeroom. Many agree that the task of scheduling is a "headache" but can be worked out with the schools. In some programs, the children attend the clinic all day for several weeks before returning to their regular classrooms. The length of time a child stays in the clinic program, of course, should depend on the extent of his disability and on his response to treatment.

An important part of the service offered by any clinic is the followup on the child's progress after clinical treatment and the followup on those with less severe reading problems after their referral to their schools. Far too often, no followup is provided for or it occurs only on paper. Yet the followup is one of the most important aspects of the work of an effective clinic. The directors of the Philadelphia Public School Clinic feel that their followup on diagnosed cases creates a significant impact on the progress.

Cost

The cost of establishing a clinic varies with the program. It depends on the number of children to be served and the kinds of services the clinic sets out to perform.

Correcting severe reading disabilities is an expensive operation and becomes more expensive in direct ratio to the seriousness of the problems. Equipment alone costs a great deal. Audiometers, telebinoculars, and other equipment, for example, create high initial expenses, although they are nonrecurring expenses. Training materials also are expensive for those clinics attempting to carry on truly individualized programs. Average textbook expenditures for elementary pupils are only $8 annually, but costs for clinical materials are considerably more.

The most expensive element in the clinic operation is, of course, the staff. Instead of the classroom ratio of one teacher for 25 or 30 children, the clinic ratio is often one teacher for six or eight pupils. A teacher working on a one-to-one basis can see only six or seven students a day if she is to have any time for reports.

Because of the variation in types of clinics and the services they offer, it is impossible to place a price tag on clinic costs or even to offer a range of costs. The following examples, however, may serve to give the administrator some idea of costs involved.

DeKalb County, Georgia, started its countywide program with a $40,000 grant setting satellite clinics in Title I schools which receive $3,000 for remedial materials. The clinic at *Albany, Georgia,* spends $300,000 of a $500,000 Title I grant for its reading materials and salaries.

Broward County, Florida, has budgeted $108,135 for its mobile clinic project. The costs are broken down as follows:

$33,000 for five trailers and one tractor
4,500 for tractor driver, gas, and oil
1,250 for custodial services
2,000 for utility hookup

16,960 for equipment
31,375 for instruction (staff and materials)
19,050 for administration

Neighboring *Palm Beach County* has a mobile program budgeted at $72,705. Its costs break down as follows:

$23,466 for three mobile reading centers and furniture
34,650 for salaries for one clinician, four reading teachers, and one secretary—2 in each van
7,890 for reading equipment
6,698 for reading materials and books

The table on page 43 gives additional information on representative costs of clinics across the country.

The buildings used for clinics vary from a remodeled corner of a school in *Cedar Falls, Iowa,* to an abandoned beauty school in *Philadelphia,* a courthouse in *Appleton, Wisconsin,* a warehouse in *Bay City, Michigan,* a former hosiery mill in *Albany, Georgia,* and an unused school building in *Buffalo, New York.* Almost any kind of a structure can be adapted; but the remodeling should create a cheerful, well-lighted, quiet atmosphere, a place conducive to learning. The machinery and equipment are usually clustered, and often another space is allocated to a library and reading room. Carrels which provide the child an opportunity to be alone and work quietly are important. The teachers' offices, if large enough, can double as instruction rooms with the addition of a table and a few chairs. Small-group instruction rooms occupy the remaining space. (See two floor plans on pages 44 and 45.)

Coordination

Usually the most difficult part of a clinical program is making sure that its activities are coordinated with those of the regular school program. This matter cannot be left to chance. A central office administrator must take the chief responsibility for seeing that coordination is planned for and actually achieved.

Problems of coordination come from all sides. Principals are occasionally reluctant to release classroom teachers for orientation or training at the clinics. But unless teachers—not only the classroom teachers but the entire staff—understand the importance of the clinical program, they may be reluctant to release the children from their classes to attend clinical sessions. The children themselves may be reluctant to go to the clinic if their appointments are scheduled at a time which interrupts enjoyable periods of the school day. For instance, a child who likes art should not be asked to forego his art class in order to go to the clinic if it is feasible to arrange otherwise. Physical education classes may be important for children with perceptual difficulties and, if possible, should not be missed. If it is convenient, the child's clinic appointment should coincide with his regularly scheduled period for reading.

Coordination between staff and classroom reading teachers is especially vital to the child's improvement. If the clinic staff recommends new material with which the classroom teacher is unfamiliar, he should ask for a demonstration of its use. If the clinic recommends a classroom program for the child, it should be sure the program can actually be carried out in a classroom and that the teacher understands it. Classroom teachers who have students assigned to the clinic may feel this somehow reflects on their ability. They, too, have to be led to understand how reading disability may occur and how the programs of the clinic may overcome such disability. Furthermore, familiarity with the clinic program aids classroom teachers to accomplish more effective individualized teaching and to better recognize existing reading problems. The greatest hope of schools for *preventing* more cases of severe reading disability lies with the classroom teacher. Understanding the clinic program helps elementary teachers particularly in spotting severe disabilities earlier. This is important because the earlier the detection, the greater the chance for a cure.

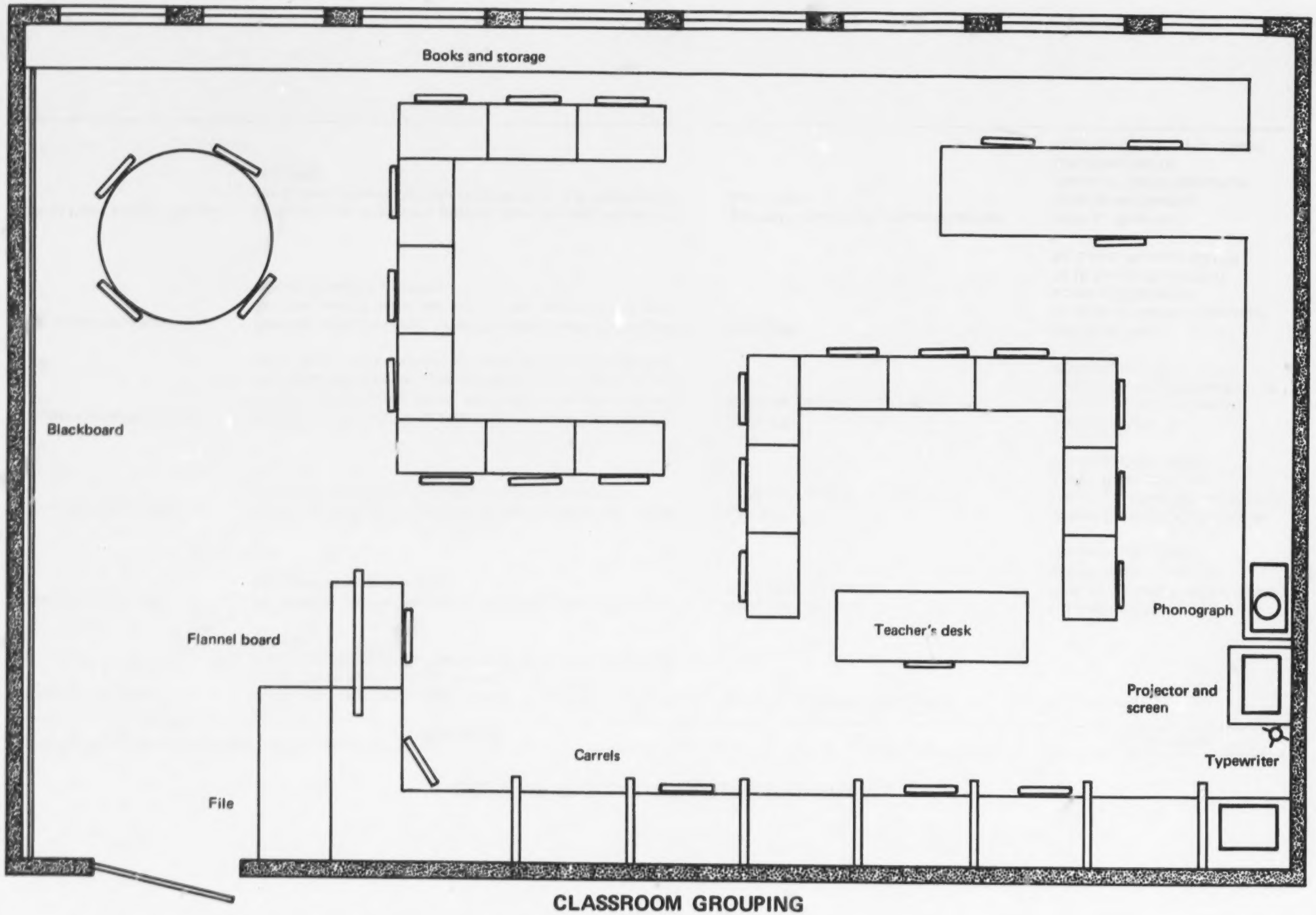
Preliminary Policy Considerations

Before attempting to fund a clinic, the administrator should consider all the factors that will have an influence on its ultimate operation. A number of policy considerations are listed here, and others which apply to any local circumstances should be added.

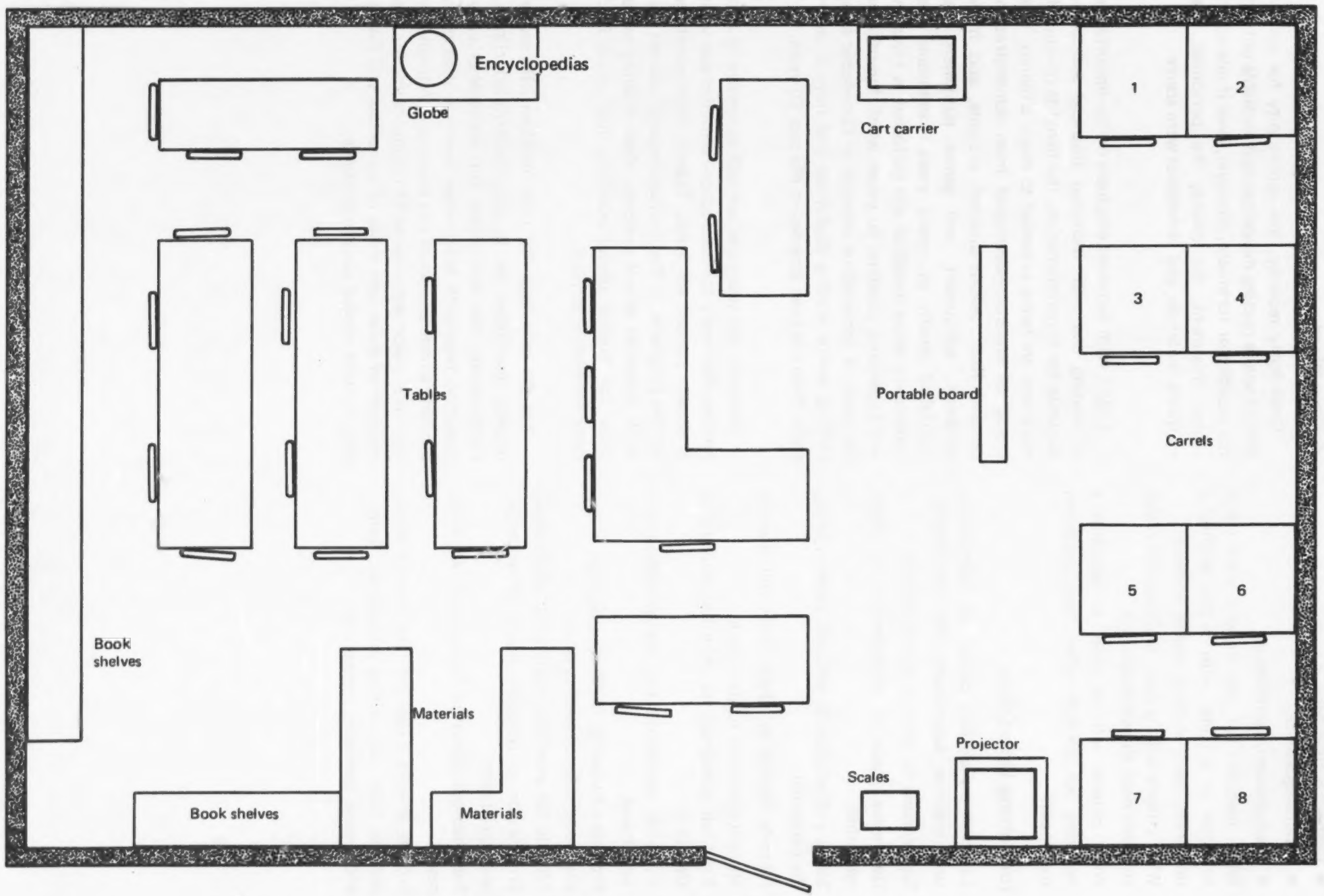
1. Will the clinic serve a single school, a single system, or an entire area? If an area, will both public and private schools use its services?
2. How many functions will the clinic fulfill—diagnosis, treatment, recommendations for remedial help in classroom, referrals to treatment centers, or all of these?
3. What staffing will be necessary to provide stability in the following areas?
   - Testing

COST OF SPECIAL READING PROGRAMS

City	*Description*	*Cost*	*Contract*
Cedar Falls, Iowa	Clinic and library with staff of six in an elementary school serves intermediate grade children with reading difficulties. Includes satellite reading centers and busing of children.	$206 per pupil for 200 pupils	Grace Leinen
Clarkston, Georgia	36 satellite clinics housed in existing school buildings, each staffed by one teacher.	$195,000: 1st year $319,000: 2d year	Estelle Howington DeKalb Schools Reading Center 955 N. Indian Creek Dr. Clarkston, Ga. 30021
Downey, California	Traveling reading unit (trailer) provides diagnostic services to nonpublic schools. Includes substitute teacher.	$18,547 $252 per pupil for 72 pupils	Arthur Emerson, Coordinator Downey Unified School District 11627 Brookshire Ave. Downey, Calif. 90241
Robbinsdale, Minnesota	Special classes for the retarded; resource teachers for visually handicapped; home and hospital tutoring; speech and language therapy; psychological and psychiatric services; social work services; educational consultive services.	$144,373 $540 per pupil for 235 pupils	Tracy F. Tyler, Jr. Director, Learning Centers Independent School District 281 Robbinsdale, Minn. 55422
St. Louis, Missouri	Reading clinic designed to treat children with reading difficulties and to train teachers in the materials and techniques of teaching reading.	$240,000	Walter A. Kapp Director of Special Education Board of Education 1616 South Grand Blvd. St. Louis, Missouri 63104
West Palm Beach, Florida	Clinician and 4 teachers provide diagnosis and instruction for 6 class periods per day for 226 days in 4 mobile reading clinics	$53,460—yearly cost of operation for each trailer	John L. Spagnoli Director of Reading Board of Public Instruction 6th Street North West Palm Beach, Fla. 33401



CLASSROOM GROUPING



SCHOOL CLINIC LEARNING CENTER

- Corrective treatment
- Parental guidance
- Clinic-teacher coordination

4. What members of the present staff could function in a clinic with a few additional university hours or other special training?
5. What criteria will be used to determine which students need clinical diagnosis?
6. What criteria will be used to establish a necessity for clinical rather than classroom treatment?

Steps for Setting Up a Clinic

1. Establish an advisory committee (administrators, teachers, supervisors, and consultants).
2. Survey need for clinic in school district.
3. Determine financial commitment to clinic operation.
4. Select a clinic director who will assist in hiring the personnel.
5. Identify facility in which clinic will operate.
6. Recruit personnel to staff clinic.
7. Establish guideiines for referring students to the clinic.
8. Establish guidelines for transportation and scheduling.
9. Provide schoolwide inservice education to explain operation of reading clinic.
10. Provide for inservice training for clinic staff.
11. Provide for an adequate supply of materials and equipment.
12. Establish guidelines for followup on all clinic cases.
13. Provide at least 2 months' lead time for clinic staff to work out testing procedures, forms, and general operating procedures.

A Final Word

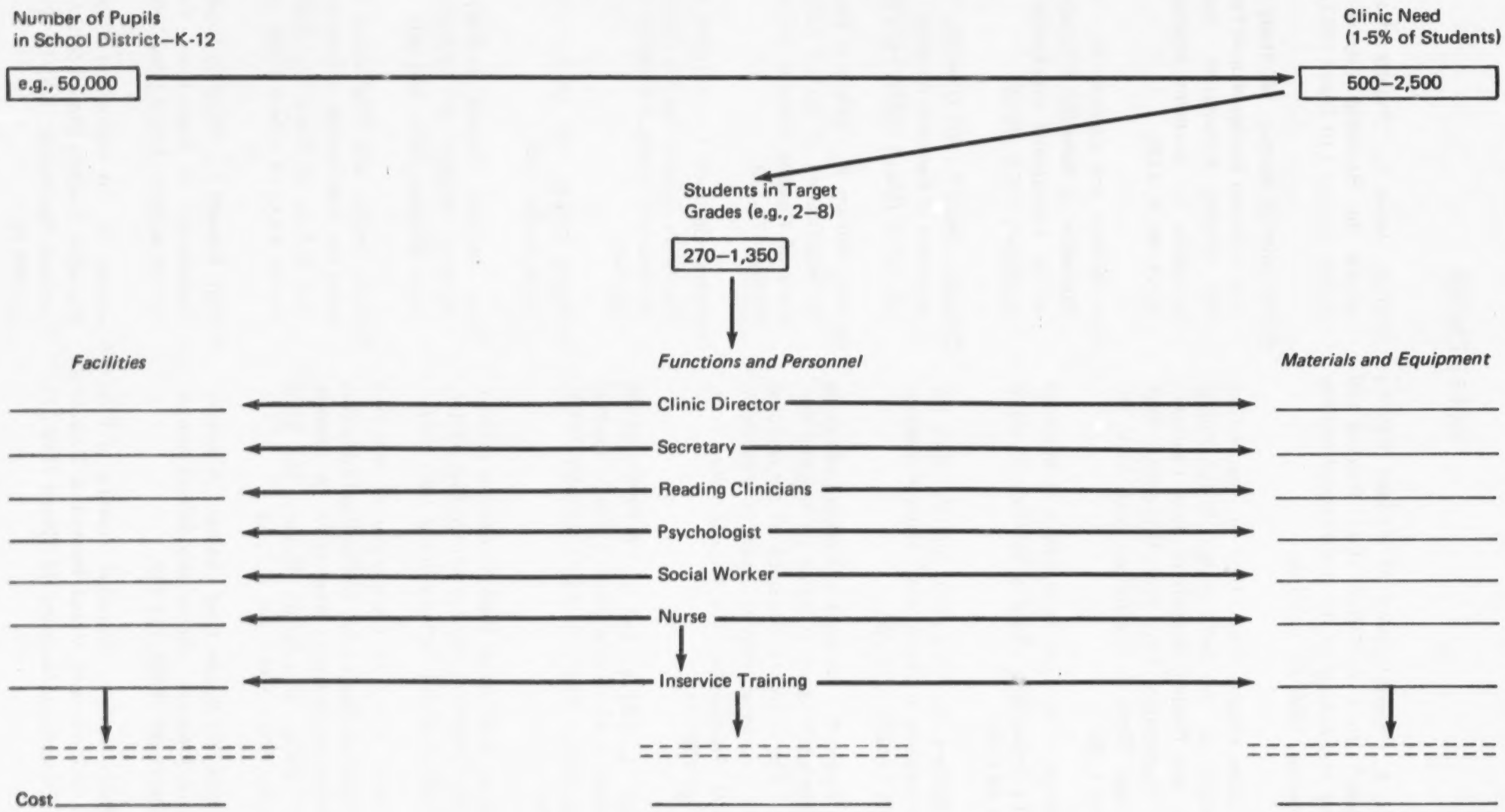
Until fairly recently, the opportunity for correction of severe reading disabilities was available only to the wealthy or fortunate. However, even if one could afford treatment, the clinics, the personnel, the methods, materials, and techniques were scarce.

Today, with increased emphasis on the importance of reading and with increased financial assistance available for experimentation, the benefits of clinical treatment are being extended to many children. The supply of materials—developed from demonstration centers, from teacher-directed projects, and from textbook, equipment, and games publishers—has multiplied greatly in recent years. Techniques are continually being modified and perfected as research and experience combine to prove which hypotheses are valid. A tremendous amount of knowledge concerning severe reading disabilities and how to overcome them has been amassed in the past 10 years.

However, the programs are still expensive—a real problem for every top-level school administrator who is already pressed for funds. Trained staff members for the programs, in the numbers needed, do not yet exist. Crowded school systems, often needing more space for normal school activities, now must find space for clinical services.

Yet the only hope for most children with severe reading disabilities lies in school-connected clinics. Furthermore, the only hope for widespread early detection rests with the pioneer work in diagnostic teaching which the clinics can encourage. Administrators with vision and a sense of responsibility for the children of today and those of tomorrow will find a way to make clinical services available.

ADMINISTRATORS' PLANNING SHEET FOR ESTABLISHING A READING CLINIC



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UNIVERSITY READING CLINICS THAT TREAT SEVERE READING DISABILITIES

Auburn University
School of Education
Reading Clinic
Auburn, Alabama 36830
Director: Dr. Gary D. Spencer

University of Alabama Medical Center
Department of Pediatrics
Clinic For Developmental and
Learning Disorders
1919 Seventh Avenue, South
Birmingham, Alabama 35233
Director: Dr. John W. Benton, Jr.

Arizona State University
College of Education
Department of Elementary Education
Reading Center
Tempe, Arizona 85281
Director: Dr. N. J. Silvaroli

Northern Arizona University
Department of Special Education
Flagstaff, Arizona 86001
Director: M. G. Beals

University of Arizona
College of Education
Reading Service Center
Tucson, Arizona 85721
Director: Dr. George Becker

University of Arizona
Department of Psychology
Psychological Clinical
Tucson, Arizona 85721
Acting Director: Dr. William L. Simmons

University of Arkansas
Department of Psychiatry
Division of Child Psychiatry
Medical Center
Little Rock, Arkansas 72203
Director: Dr. John E. Peters

California State College at Long Beach
Educational Psychology Clinic
Long Beach, California 90804
Acting Director: Dr. L. Stacker

California State College at Los Angeles
Department of Associated Clinics
5151 State College Drive
Los Angeles, California 90032
Director: Richard G. Cappicott

California State College at Los Angeles
Department of Psychology and Special
Education
Learning and Behavior Problems Project
Los Angeles, California 90032
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San Diego, California 92115
Director: Ramon Ross

San Francisco State College
School of Education
Learning Clinic
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San Francisco, California 94132
Director: Dr. Louis H. Falik

Stanford University
School of Medicine
Dept. of Speech Pathology and Audiology
Institute for Childhood Asphasias
1691 El Camino Road
Palo Alto, California 94306
Director: Jon Eisenson

University of California
Psychology Clinic School
405 Hilgard Avenue
Los Angeles, California 90024
Assistant Director: Dr. Howard Adelman

Whittier College
Department of Education
Reading Clinic
13425 E. Philadelphia
Whittier, California 90608
Director: Lola B. Hoffman

Colorado State University
Department of Hearing and Speech Service
Speech and Hearing Clinic
Fort Collins, Colorado 80521

University of Colorado
Speech and Hearing Clinic
934 Broadway
Boulder, Colorado 80302
Director: Ned W. Bowler

University of Denver
Department of Speech Pathology and Audiology
Speech and Hearing Center
University Park Campus
Denver, Colorado 80210
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Western State College
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Gunnison, Colorado 81230
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University of Florida
College of Education
Personnel Services Department
Children's Learning Center
Gainesville, Florida 32601
Director: G. S. Hasterok

University of Florida
Department of Comprehensive English
Reading Laboratory and Clinic
310 Anderson Hall
Gainesville, Florida 32601
Director: Dr. George Spache

University of Miami
Department of Special Education
Child Development Center
Coral Gables, Florida 33121
Director: Dr. DeForest L. Strunk

Emory University
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SAMPLE BOOK LIST FOR A READING CLINIC

Title	*Publisher*	*Grade Level*	*Reading Level*
Adult Basic Education Books	Steck-Vaughn	Beg.—adult	1-12
Building Reading Power	Chas. E. Merrill	5th	3-5
Building Reading Skills	McCormick-Mathers	1-6	1-6
Computational Skills Dev. Kit	Science Research		6-9
Cyclo-Teacher (Teaching machine)	Field Enterprises Educ. Corp.		
Deep Sea Adventure Series	Harr Wagner	3-10	2-6
EDL Skills Library	Educational Dev. Lab.		3-9
EDL Word Clues	Educational Dev. Lab.		7-13
First Adventures in Learning Program	Associated Ed. Services Corp.		
Gates-Peardon Practice Exercises in Reading	Bureau of Publications, Columbia Univ.		2-6
I Want To Be Books	Children's Press	k-3	1
Invitations to Personal Reading	Scott, Foresman		1-6
Jim Forest Readers	Harr Wagner	1-6	2-4
Kaleidoscope of Skills: Reading	SRA		5-7
Learnings in Science II	SRA	4-6	
Lessons for Self Instruction in Basic Skills (Reading)	California Test Bureau		3-9
Literature Sampler	Encyclopedia Britannica	4-6	
Little Owl Series	Holt, Rinehart, Winston		K-2
McCall-Crabbs Stand. Test	Bureau of Publications, Columbia University		2-12
Morgan Bay Mystery Series	Harr Wagner	4-10	2-8
New Practice Readers	Webster-McGraw-Hill		
Pilot Libraries	SRA		4-8
Programmed Reading	Webster-McGraw-Hill		Preprimer-4
Reader's Digest Adult Readers	Reader's Digest Ed. Service, Inc.		1-3
Reading Essentials Series	Steck Vaughn Co.		1-8
Reading Spectrum	McMillan		4-6
SRA Reading Laboratories	SRA		K-college
Spelling Work Power Lab.	SRA	4-7	
Sullivan Reading Program	Behavioral Research Lab.		Preprimer-4
Torchbearer Library	Harper-Row		
Wise Owl Series	Holt, Rinehart, Winston	4-6	
Young Owl Series	Holt, Rinehart, Winston		2-4

NOTE: List furnished by the Dougherty County Clinic, Albany, Georgia.

DIAGNOSING READING PROBLEMS

With any problem, diagnosis should precede action. In the diagnosis of reading problems, the teacher tries to understand the child's reading strengths as well as his weaknesses. The more his strengths and weaknesses can be pinpointed, the more likely it is that a corrective program can be devised that will take advantage of what he does well and attack directly those skills he lacks.

A few general things can be said about reading diagnosis. For one, it should be continuous and interwoven with treatment. Secondly, the earlier the problems are discovered, the more hope there is for conquering them. A specific diagnosis is probably the key factor in prevention as well as in remediation of reading difficulties. Hopefully, diagnosis leads to "diagnostic instruction," which attempts to individualize instruction to match the teaching with the problems to be overcome.

The first step in classroom diagnosis is to describe the reading performance in terms of vocabulary, word recognition, sentence and paragraph comprehension, and related abilities (Strang, 1968, p. 4). Teacher observation and informal and standardized tests, which will be discussed later, are the chief tools for the teacher. Other indications might come from classroom exercises related to reading performance, short vocabulary quizzes over assigned new words, paragraph reading followed by writing sentences stating main ideas, and new vocabulary words introduced through attention to work analysis skills. With some students who are having relatively minor trouble, the teacher can spot the difficulties immediately and take equally immediate steps to correct the problems.

Another diagnostic technique for the classroom teacher is to consider behavior, other than reading performance, which could be affecting the pupil's reading. The teacher may note, for example, that the pupil is passive or has a low energy level so that he simply cannot put out the effort that reading demands. Some pupils have such meager speaking vocabularies that it is impossible for them to decode or understand the words they encounter in reading. Still others display emotional problems, such as anxiety, that keep them from concentrating in school. And there are many instances of poor work habits, with an "anything goes" attitude, that can influence a child's ability to read (Strang, 1968, p. 5).

Checklists can be helpful in estimating pupil skills, attitudes, and behavior. A sample checklist for use in observing and evaluating attitudes toward reading is reproduced below. The teacher might use + or − to indicate the presence or lack of the attitude under consideration. Other checklists can be devised to serve other needs.

Inventory of Growth in Attitudes Toward Reading

	Judy	Ann	Jerry	Ed
Does he anticipate reading periods with pleasure?				
Does he use books frequently during free periods?				
Does he find opportunities for reading at home?				
Does he read newspapers and magazines?				
Does he show interest in reading a variety of books?				
Does he read for information?				
Does he usually finish the books he starts?				
What kinds of books does he like best?				
Does he make frequent use of the school or public library?				

A deeper level of diagnosis comes from an attempt to analyze activities related to the process of reading, such as auditory and visual perception, differentiation, association, retention, analysis, and evaluation leading to motor, visual, or vocal output. This and other levels of diagnosis are treated more fully in the chapter on *The Role of the Reading Specialist in Conquering Reading Problems.* Some levels of diagnosis are ordinarily reserved for clinicians who include in a diagnosis such things as psychological, sociological, and intellectual disabilities that prevent a child from learning to read.

Two Objectives

In a diagnosis, the classroom teacher has two objectives in mind. One is to determine the correct instructional level for the child. This level can be defined as that at which the child can read successfully with direction from the teacher. At this level, the child should be able to comprehend 75 to 80 percent of what he reads, to pronounce at least 95 percent of the words encountered, and to read orally with natural rhythm and good phrasing (Betts, 1946, p. 539). In any given classroom, it is likely that there are as many as five instructional levels. The second objective of classroom diagnosis is to discover the specific skills a child lacks. If this objective is not kept in mind, the teacher might continue instructing

the child in skills he has already mastered and ignore those on which he needs special help. (See the chapter on "Techniques for Classroom Diagnosis of Reading Problems.")

Finding the instructional levels for children in the classroom and identifying the specific reading skill weaknesses that each child has can be accomplished through various measurement and evaluation techniques. Formal group survey tests, informal inventories, and daily observation in the classroom are three specific ways of identifying the needs of children.

Group survey tests are one instrument to measure comprehension, vocabulary, and reading rate, as well as determining the grade level at which the child reads comfortably. The Gates Primary Reading Tests and the Iowa Tests of Educational Development are instruments widely used for group survey. In addition, the publishers of basal readers have produced tests intended to be used to see whether a child is ready for a specific book in a reading series.

Survey tests are diagnostic only in that they give limited information on vocabulary, comprehension, and reading rate. However, more diagnostic information can be obtained through the use of teacher-made tests and informal reading inventories.

Teacher Tests

Probably the most widely used diagnostic tools are teacher-made tests. In these, the teacher makes up the test on the spot and is looking for only one or two things. For instance, in working with a pupil, the teacher may wonder if the child can identify a certain digraph, such as *ch*. She gives him several words beginning and ending with *ch*. If she wants to test the child's comprehension, she simply asks him to read a paragraph, close the book, and then tell her what was in the paragraph or answer questions about it.

The informal reading inventory is somewhat more structured. Using a reading series the child has not seen before, the teacher has him read orally sample paragraphs at varying levels of difficulty. Comprehension questions dealing with facts and ideas follow each reading. By carefully marking errors made in oral reading and by evaluating the kinds and frequency of errors and answers to comprehension questions, the teacher can identify the child's independent, instructional, and frustration levels. (Johnson and Kress have a reading aids booklet on the development and use of the informal reading inventories, published by the International Reading Association.)

A word should be said about the various reading levels a child—or an adult—has. The independent reading level is the one at which the person reads easily and comfortably and for pleasure (Betts, 1946, p. 446). The instructional level is that at which he can pronounce 95 percent of the words and comprehends less than 70 percent (Betts, 1946, p. 539). The frustration level is the one at which the reader bogs down hopelessly (Betts, 1946, p. 451). Group survey tests usually indicate a child's frustration level. The child will usually have a higher instructional level than independent reading level; so if it appears that he likes to read material that the teacher thinks is too easy for him, he is simply seeking the level at which he can relax. In too many classrooms, especially those where instruction is not geared to individual differences, many of the children may be forced to read at their frustration levels.

Information To Look For

Whatever instrument is used, a teacher is looking for information about the child's general reading skills, his word attack skills, and other relevant data.

Under general reading skills, the teacher would note expression, nature of enunciation, skill in phrasing, word-by-word reading, physical habits during reading, and attitude toward reading. Word-recognition skills encompass the use of context to guess the word, adequacy of sight words, and adequacy of procedure in phonics and structural analysis. Word attack skills will show up the pupil's ability to blend sounds, analyze words, syllabicate, recognize parts of compound words, and recognize specific vowels and consonants. Word-recognition difficulties the reader might display are reversals and the wrong beginning, middle, or ending. Other difficulties the child might display are repeating words, omitting them, or refusing them.

Related to general reading ability are such data as whether the child hears and sees well or whether he has speech difficulties or other physical defects that might interfere with learning. His abilities to concentrate on and persist in tasks are directly related to his learning to read.

Classroom Observation

The most obvious and perhaps the most important diagnostic technique is the teacher's classroom

observation of the child. This technique is used every day by every classroom teacher, and is probably the best one for understanding how a child reads. But it tells nothing about *why* a child reads as he does.

Dr. Ruth Strang (Strang, 1961, p. 43) suggests four safeguards for the classroom teacher to avoid misinterpreting observations of the child:

1. Since the student is always changing and growing, an observation that was made last year may not describe his present reading performance.
2. A teacher can observe only a small part of a student's total behavior. On the basis of such limited information, the teacher can make only tentative generalizations about the student's reading.
3. Observations made by a teacher may tell more about the teacher than about the student. His first impression of the student, his philosophy of education, and many other factors may color what he sees.
4. Ideally, observations should be interpreted in conjunction with interview, test, and other data. However, observations often are the only data that are available at the moment, and sometimes action should not be deferred.

The more a teacher is aware of what *could* be observed, the more she can improve her observation skills.

As a child is telling an experience in the classroom, the teacher could observe many things:

- whether the child's use of language shows a rich vocabulary or one that is meager or even wrong
- whether the child speaks in complete sentences, and whether he uses complex sentences
- whether he shows creative or bizarre imagination—or none at all
- whether he shows a sense of humor (humor is highly correlated with intelligence which, in turn, is highly correlated with reading ability)
- whether he is interested or apathetic
- whether he is self-confident or shy

When the child reads aloud, the teacher has a chance to see what skills he has in recognizing words, in pronunciation, phrasing, and expression. The student will also give away his feelings (attitudes) about reading, either by sitting up straight, eager to read next, or slouching in his seat, paying little attention.

If a child substitutes words in a sentence, he gives clues about his abilities. If the word is incorrect but makes good sense, then he probably comprehends what he reads. If it makes no sense, he is just pronouncing words with no understanding or regard for meaning.

Group instruction and discussion present many opportunities for observation, but also bring up some questions for the classroom teacher. During group reading periods, the teacher can observe the children who like to participate and willingly do so. During group discussion, a usually silent child may reveal undetected ability, such as responding to a story or a picture with exceptional originality. However, there are pitfalls in group instruction. For one thing, the children probably do not all read at the same level and so there is always the danger of the good readers being bored by the material and the poor readers being unable to follow it. Even so, group interaction has its salutary effects. The brighter students may stimulate those having difficulties and encourage them to read better. The poorer ones may catch the sense of excitement in reading and be motivated to learn. It is up to the teacher to see that the poorer students are not embarrassed by having the others laugh at their mistakes.

The more able the classroom teacher, the fewer children who will need remedial instruction. Providing intelligent reading instruction depends on the ability of the teacher to diagnose the child's reading status, to teach him on his appropriate instructional level, and to develop a reading program that is sequential and relevant to the child.

Part of the classroom teacher's job is to know when a disabled reader needs greater help than can be offered in the classroom. Pupils who should be recommended for remedial classes or for clinical study are sometimes not referred by teachers who feel that such referral might, in some way, be a reflection on their teaching abilities. An honest recognition of the limits of time and expertise open to the classroom teacher would be far better for the child who, if he is denied extra and expert help, could be doomed to the life of an illiterate. It is not always easy for the classroom teacher to know when the child ceases to benefit from instruction available in the classroom and needs special attention outside the classroom on a more individual basis. In those cases where the teacher has difficulty in making a decision,

it is good for him to discuss the problem with the principal or the school counselor and the reading specialist. These are the people involved in making decisions about the movement of children from one kind of teaching situation to another; and, gradually, some criteria should be established that would help all classroom teachers making the decisions. Naturally some of these decisions have to be based upon the availability of a reading specialist and the number of children who need treatment by that specialist. It should also be evident that the teacher must provide some observations and data on any child that he wants to refer for special help. Part of that referral should include a statement of what he has done in the classroom to try to correct the disabilities that have been observed.

WORKING WITH GROUPS AND INDIVIDUALS TO CORRECT READING PROBLEMS

Children learn to read in a number of ways, not through a single approach. The Harvard-Carnegie study found that schools use basal readers, experience charts followed by basal readers, phonics programs that precede and accompany basal readers, the language experience approach, and individualized reading programs to teach children to read (Austin et al., 1961, p. 21). Most of these so-called approaches are associated with specific kinds of materials and so we are accustomed to thinking of correcting problems in reading by referring to materials of a special kind. A more fundamental notion of how to correct reading difficulties, however, should be to think of the approach to teaching children to read as a system. A system is a planned strategy for instruction with an underlying rationale. If the teacher knows this strategy and rationale, he can more easily identify problems that the children are having and take steps to overcome those problems. Most of the approaches to teaching reading, especially at the beginning level, can be arranged into four kinds of systems: (1) the controlled vocabulary approach, (2) the multisensory language arts approach, (3) the programed instruction approach, and (4) the individualized approach. Each of these systems represents a way of getting children to look at reading, handle the analysis of new words, develop an attitude toward the process of reading, and build habits of interest and interpretation of what is read.

The controlled vocabulary system approach is the most structured of the four systems for teaching reading. The learner reads from a book which is carefully graded in terms of reading difficulty and controlled from the standpoint of vocabulary, sentence length, and complexity of story. The learning principle of the controlled vocabulary approach is to proceed from the known to the unknown. This principle applies both to reading vocabulary and to the content of the stories that appear in the readers. Thus, very familiar words associated with the home or neighborhood environment are used in the beginning stages of reading. These words are repeated again and again so that the only problem is one of visual recognition and not one of meaning or comprehension. One of the features of the controlled vocabulary approach is the carefully selected vocabulary and its planned introduction of elements in a given sequence. The child is introduced to and practices the elements until he has mastered them. This approach or system is the one most frequently used by school systems in the United States (Austin, 1961, p. 21).

The multisensory language arts approach contrasts in structure and organization with the controlled vocabulary approach. The multisensory language arts approach springs directly from the interests and needs of the child, thus very little structure can be predetermined. In this approach, the children create or select their own reading materials, and a teacher uses inductive techniques to get the children to understand word recognition techniques and to comprehend sentences and longer passages. The emphasis of this approach is on the interrelatedness of various communication skills. Speaking, listening, reading, and writing form various facets of personal communication, and of course the basis for all communication is thinking. Therefore the principle on which this system operates is this: What a person thinks can be said; what he says can be understood and written; what he writes can be read and understood by someone else (Loban, 1963; Strickland, 1962). In the beginning stages of this approach there is a decided attempt to show the relationship between oral language and written language. Often teachers ask children to dictate stories to them, and the teacher writes down the stories with the children. The students are then encouraged to read back from the paper what they have just dictated. Thus, reading instruction utilizes the language and experience of the child; and, as he grows in his ability to read, with the teacher identifying words and sounds as necessary, the child begins to select books that are appropriate to his interests and to his reading level—all the while sharing his ideas and his new-found interests with other

members of the class. This is not to say that commercial materials are not used, for teachers often supplement the experience stories and individual exercises generated from these stories with exercises from commercial workbooks that fit the needs of the children as the teacher identifies them.

The programed instruction approach takes the student through a series of carefully planned steps, often in the form of statements or questions, leading to predesignated behavior. The child, for example, would be able to make distinctions among a number of words and find those which rhyme with the word *rat.* Programed instruction usually relies quite heavily on carefully sequenced materials that enable a child to move at his own pace and to make inductive conclusions about words and sentences. One of the significant features of programed instruction is that it provides immediate reinforcement to the learner and enables him to see when he's making a correct or an incorrect response.

The individualized approach is related to the language arts and the programed approaches in these two ways: it enables a child to select his own reading material based on his interests and needs, and the child proceeds at his own rate through the development of reading skills. Nearly all reading is done from trade books that the child selects himself after a conference with the teacher. The teacher's responsibility is to provide a checking system and to evaluate the child's progress. Children are brought together only when the teacher finds that several of them need an explanation or practice in a given reading skill, or as a mutual interest among the children indicates the desirability of having discussion or creative activity related to this interest.

It would be advantageous, of course, for every learner to be matched with the system that best suited his personality and his learning style. The matching of learner with a system to suit his needs will, however, usually not occur, due to the organizational pattern and the materials selection practices of schools in the United States. Even if learners were matched correctly, that still would not eliminate all problems, for some learners are going to experience difficulty no matter what system they are in. The advantage of teachers knowing about several systems is that they can adjust their instruction to individuals and use techniques from various systems when they find that students learn certain phases of reading best when a particular approach is used. Generally, however, the same techniques that are effective in the general developmental program can be used effectively in corrective activities.

Each of the systems described here indicates different arrangements, or organizational patterns, for classroom instruction. The same variation is necessary in organizing classes for corrective instruction. A classroom has to have flexibility for corrective instruction and has to be organized so that it can be carried on with a minimum amount of confusion. Schools across the country have experimented with a number of techniques for corrective reading activities in the classroom. These activities can have two different focuses: one is aimed at prevention and the other, at the correction of a specific skill deficiency found in a specific individual at a given time.

Schools interested in prevention organize a classroom and carry on scheduled activities that are designed to eliminate some long-standing problems. For example, some schools set up listening posts in classrooms and have the children go through a series of exercises to develop good language patterns, thus applying preventive measures aimed at correcting reading difficulties. On the other hand, upon realizing that a child does not know how to summarize or give the main idea of a paragraph, the teacher can have that child work in a conference corner with a series of exercises that he takes from a supply of books in the classroom.

Many of the administrators and teachers interviewed for this monograph believe that, unless the classroom structure is changed to encourage work on specific problems, either for groups or for individuals, corrective activity is likely to go undone. The next few paragraphs, then, discuss a number of instances in which teachers have organized their classrooms and instruction, or changed the structure of their classrooms to carry on corrective reading activities. (The reader must consider the system under which he is working and try to adapt the suggestions of these successful organizational patterns to his own situation.)

Here are some of the elements that were used in successful programs:

1. Materials
2. Rearrangement of desks and equipment
3. Personnel changes
4. Reduction in class size
5. Ungraded approach
6. Team teaching

Successful Programs

Given below are brief descriptions of the organization of successful programs for corrective reading in the classroom. In many cities teachers and administrators reported a decided improvement in students who were being treated in the classroom under these organizational patterns. As mentioned before, the patterns naturally have to be adapted to whatever system or conditions exist in the teacher's own classroom.

The teacher, though interested in meeting the needs of the individual, faces an entire class. Organizing instruction so that a class may be taught as a community, with all members doing educationally worthwhile things, is the teacher's goal. At the same time, instruction must be adjusted to meet the needs and characteristics of individuals. This means that the classroom and the teacher must be organized so that the teacher can devote attention to children who need special guidance. The problem of adjusting instruction to individual differences in a classroom is probably the most difficult of all.

Providing Materials and Equipment—Title I reports from the U.S. Office of Education and the Austin and Smith study (1967) summarize many of the innovative ways in which school systems are attempting to reorganize the classroom for more corrective work on reading. The most frequent change, though not innovative, has been the addition of new materials and equipment. Many reading directors feel that providing the materials and equipment is an initial step in getting corrective activities into the classroom. However, simply providing materials and equipment will not assure improved reading ability on the part of the children. These must be easily accessible to the teacher and the students; and the teachers, of course, must have training in their use. Probably the most significant benefit of having a wide variety of materials and equipment, beyond simply enabling the teacher to turn quickly to a handy reference on corrective instruction, is increased student interest. The abundance and availability of these items spark the student's interest and can lead to learning, provided that interest is capitalized on.

Choosing materials and equipment poses some problems, and sometimes the people who make the choices do not know enough about reading to select materials that will serve classroom needs. San Francisco, California, tries to solve this problem through their "Market Basket" plan. Principals choose the material and equipment for their schools. They are shown reading materials from a wide variety of publishers and are asked to consult with their teachers on what should be most beneficial in the classrooms. This program is called the "Market Basket" approach because all the teachers have the opportunity to pick and choose. The principal then orders materials according to the amount of money that is available to him.[1]

Another interesting development is that some school districts hire their own teachers and reading consultants to write and publish materials that are especially suitable for the population in that school district. In Sarasota County, Florida, for example, a diagnostic reading test was developed by the faculty. The test was given to the students in the county and then county norms were established. Many detailed activities for analyzing reading problems and a course of study were prepared by the reading faculty for use by the classroom teachers. The course of study offers suggestions for helping students who need it in specific areas covered by the test.

Richmond, California, not only wrote its own study guide for corrective reading in the classroom but also developed sample exercises to be used by the classroom teacher for specific skill development.

Rearranging Classroom Desks—Some administrators feel that, in order to bring about diagnosis and correction of reading difficulties in the classroom, the physical arrangement of the classroom must first be changed. Changing desk arrangements alone may make a teacher more conscious of individuals and individual activity, and so the diagnosis and correction take place.

One of the simpler arrangements for handling individual problems is the inclusion of a listening post in the classroom so that the teacher can tape an individual exercise, with specific directions for a child or small group of children, and then have them listen and respond to this tape through headphone sets. Santa Maria, California, is one of many cities where this is done. There, one tape recorder and phonograph can be plugged into a unit containing 12 headsets. The equipment sits on a utility cart for mobility and can be moved from one corner of the room to another.

A more elaborate example of rearranging the classroom for specific corrective activities can be seen in classrooms in Pinellas County, Florida. Four different areas are set up for different kinds of

[1] Descriptions of programs and activities in the schools are taken from the Austin and Smith study of Title I reading programs (1967), the report by the President's Advisory Council on Education, and from on-site visitations by the authors.

instruction, which can be given simultaneously. Pinellas County uses a tape recording area, a controlled reader area, an overhead projector area, and a library area. The diagram on the following page indicates the arrangement.

In Youngstown, Ohio, another approach to reorganizing the classroom provides for five different areas of instruction within the same classroom. This approach, however, requires the use of a teacher aide or teacher assistant in order for the five areas to operate successfully. There is a 12′ by 12′ glass-enclosed area called the confrontation area in which the teacher can instruct a small group of students. The room is also equipped with a kinesthetic unit—a compartmentalized table housing six standard typewriters; a tactile table—a 3′ by 6′ table for six students who need sensory experiences such as puzzles or manipulative games; a listening console with headphones—to develop specific listening skills through the use of specially prepared tapes; and an audiovisual area—containing an overhead projector, filmstrip projector, and a screen. These areas are used for a variety of instructional and motivational purposes. The accompanying diagram illustrates how the various parts of the room are arranged.

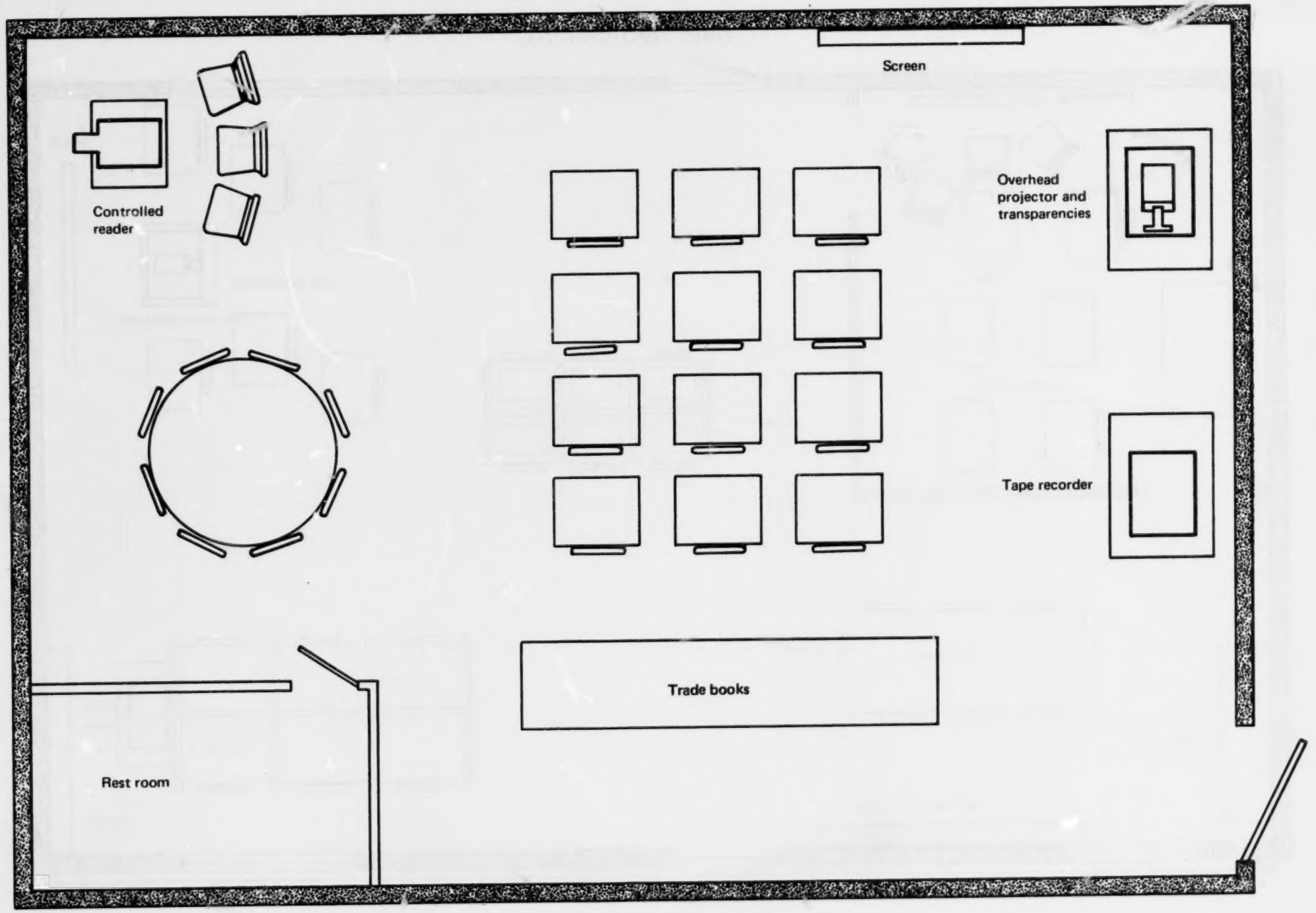
Many school districts have given the classroom teacher the opportunity to correct reading problems by offering them additional help. These programs may have been initiated under the concept of lowering the teacher-pupil ratio and thus giving the child more frequent adult contact and direction. This approach works well where teachers have been guided in the use of an assistant and consequently know how to use an additional person in the classroom.

New personnel may range in formal school training from volunteers recruited from the community to highly trained reading specialists and consultants. The addition of good personnel can be a great benefit to the classroom teacher and to the students. The specific duties or obligations of these teacher aides vary greatly. The teacher aide, whether full- or part-time can relieve the teacher of many routine tasks, including some tasks that are directly associated with instruction. Santa Maria, California, hired teacher aides for every elementary classroom. Each aide worked 2 hours a day in the school. The duties of these aides varied from school to school, but their primary purpose was to relieve the teacher of clerical duties. Some of the teachers had the aides listen to children read, and some also read stories to the children.

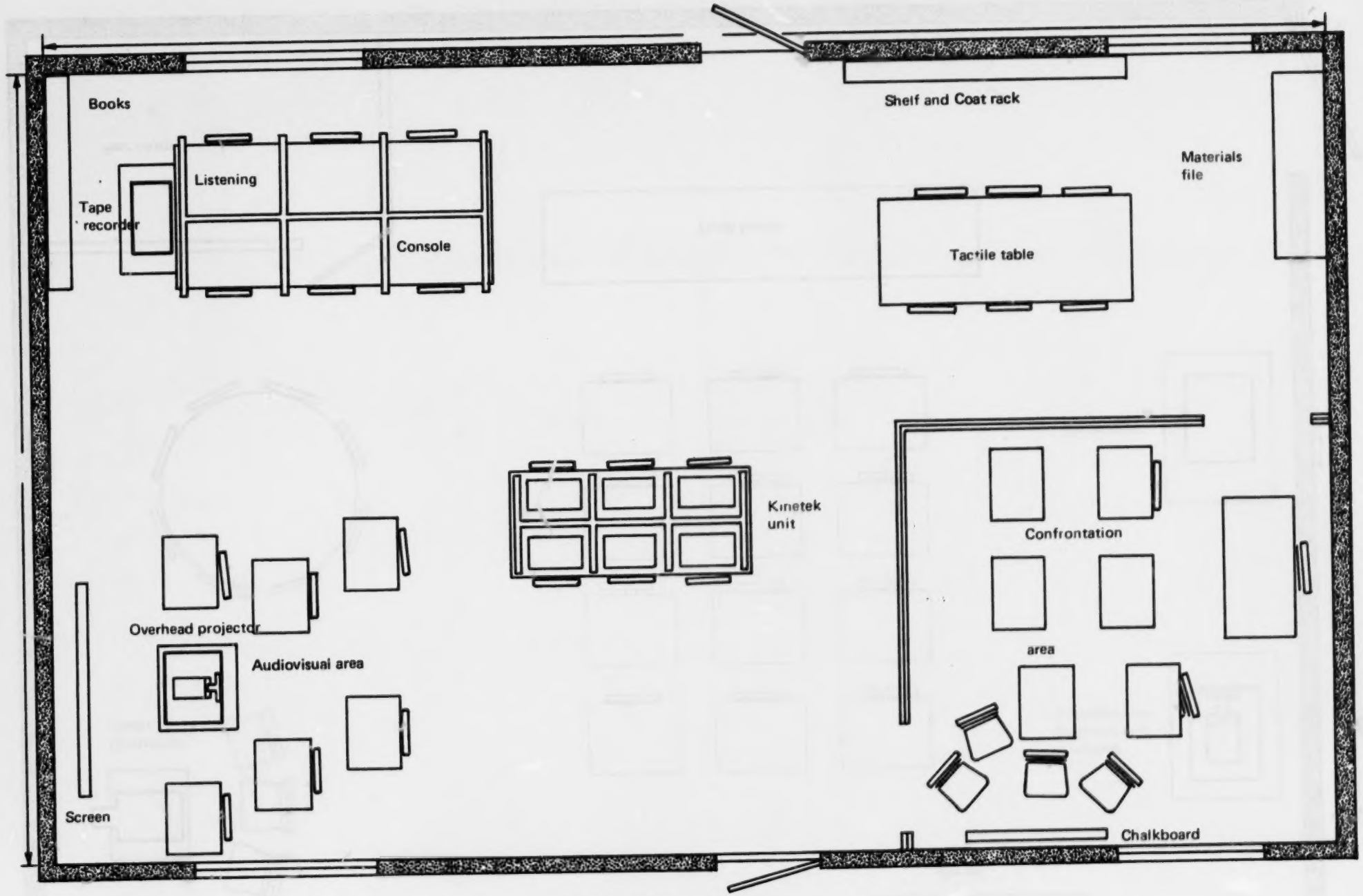
Some school districts use teacher aides as instructional assistants. In Youngstown, Ohio, the teacher sets up a plan for each of the pupils in the classroom, and the teacher aide carries out some sections of the lesson plan of each child. The aide gives the child directions as he prepares to write his own story, or sets up a flashcard game so he can practice his vocabulary, or puts on appropriate tapes and gives the child the worksheet he needs to follow along.

Some school districts have hired highly qualified help to provide guidance for the classroom teacher. Teachers should take advantage of the expertise of the reading consultants or reading resource person to find out what diagnostic and corrective techniques are available. Some school systems like Cincinnati, Ohio, Kansas City, Missouri, and Detroit, Michigan, have one reading resource teacher for every inner-city school. Teachers are free to ask the resource teacher to acquaint them with materials, to demonstrate how to handle a small group of children having specific reading problems, to come into the classroom and diagnose a child's difficulty, to take a child privately for diagnosis, to plan a program of treatment to be carried out in the classroom, and to demonstrate a variety of techniques for treatment of children with some of the minor reading problems that the classroom teacher is able to treat. Other school systems have similar resource teachers, but share them among two or more schools. Los Angeles, California, and Cleveland, Ohio, operate on a shared basis. The teacher should keep in mind that the resource teacher is available for his benefit and the benefit of the students, and he should feel free to have that teacher come in any time or often to help out.

Another type of classroom modification is the addition of teachers hired specifically to circulate from room to room to do corrective reading. One form of this circulating teacher can be found in Oakland, California, and Denver, Colorado, where they have "swing" teachers. In Oakland, three teachers work in every two classrooms. Two of the teachers are regular homeroom teachers and the third is a "swing" teacher who spends half the day in one classroom and the other half in the second. Usually he engages in corrective reading activity with those children who need help. The swing teams find it convenient to rearrange the furniture so they can perform at the same time. They put up dividers, bookshelves, or racks so that one corner or even one third of the room is blocked off for the swing teacher. In New York City a slightly different arrangement has been made in order to reduce class size. There, in the primary grades, two teachers perform in one classroom.



PINELLAS COUNTY, FLORIDA



YOUNGSTOWN, OHIO

Where two professional teachers are teaching separately in the same classroom, some rearranging of classroom structure is usually necessary. Teachers have used their ingenuity in creating small group confrontation areas as well as large group and general work areas. Most corrective activities take place in small groups in what is known in some classrooms as the teacher's corner. The children return to a larger work area to carry out the practice activities given to them by the teacher.

Another type of reorganized class that can be quite beneficial for correcting reading problems is the nongraded arrangement. In Portsmouth, Virginia, a nongraded program uses reading as one of the key elements to determine progress. A series of tasks in reading must be accomplished by each student. When a student experiences difficulty, the teacher becomes aware rather quickly of the difficulty because of the specifically defined tasks. Corrective measures can be administered without too much difficulty. The need for individualized small group instruction is evident in this type of program, and organizational arrangements within the classroom must be made to accomplish it. There is no set pattern for classroom organization in the Portsmouth program except that small-group activity is promoted in inservice training programs and is usually assured in the classroom, for the classroom teacher is given one dozen each of three different basic tests. This makes whole-group instruction from one textbook rather difficult. The variety of texts also recognizes the fact that within the series of tasks to be accomplished there will still be considerable variance on the part of the students.

Flint, Michigan, has a nongraded approach to reading and adds this variable: A reading teacher goes from room to room on a regular schedule and works with a maximum of six children at a time, especially helping those who are in difficulty and helping the classroom teacher set up corrective activities for those who are experiencing difficulty in reading. Within a given room, however, a variety of ages will occur, since the Flint schools are arranged on an ungraded primary and an ungraded intermediate organizational plan.

At the high school level, the most frequently reported kind of corrective activity falls into two categories: (1) a reading laboratory in which children come from various classrooms and report on a regular basis to a reading teacher,[2] and (2) a form of team teaching where a team of teachers uses one of their members as a corrective reading teacher. This kind of teaching can be found in Oakland, California, Denver, Colorado, and Phoenix, Arizona. In Oakland, the team consists of three teachers and an aide. One of the teachers uses almost all of his instructional time for corrective activities, and his room is especially equipped for reading activities. The teacher aide assists in the collection of data and in keeping folders and test information in order. The other two teachers, who conduct English classes both on a whole-group and small-group basis, make observations about youngsters who seem to be having difficulty, and participate in the recommendation and survey testing of the children in their class who can benefit from corrective activity in reading.

In Phoenix, three large multiuse rooms were remodeled to form a language learning center. The center contains room for four English classes, four reading classes, and a central office.

The reading classrooms are equipped with materials for diagnosing reading deficiencies and teaching reading competencies with a wide variety of approaches and motivational devices, such as tape recorders, record players, and overhead projectors. Since four English classes and four reading classes meet around this learning center during each period of the day, a student may be moved from group to group at any time according to his particular needs. This regrouping of students is accomplished on the basis of observation by the eight teachers involved in the program. The eight teachers meet as a team not only to plan general instructional strategy but also to discuss the ways that the English teachers and the reading teachers can work cooperatively to give the entire group of students the best learning experience. Once again, each teacher is conscious of possible reading problems so that corrective techniques can be applied almost immediately.

Stimulating Poor High School Readers—Programs to improve reading in high schools are less frequent than are elementary programs. This is particularly true of classroom programs. One reason for this is that secondary teachers often have limited, if any, training or experience in teaching reading skills. Consequently, they may not be able either to recognize or to correct reading skill difficulties in their students. They may not be able to determine students' reading levels or to differentiate between the levels at which students read and the level of reading required for mastery of subject area materials.

Fortunately, this situation is slowly changing.

[2] This is not typically what is meant by correction in the classroom and so does not fit the context of this monograph.

Increased community interest in reading programs and increased availability of funds to finance them have made more secondary programs possible. Secondary teachers have become aware of the need for reading instruction in their classrooms and are experimenting with a number of new ideas for building reading skills. Many secondary teachers are taking courses which enable them to deal with the reading difficulties of their students.

San Francisco has made a concerted attempt to get subject matter teachers in high schools interested in the problems of reading. For example, history teachers in one project have half of their classes with students who are poor readers. The subject is still history but new techniques are used. One class, for instance, might have a teacher-devised crossword puzzle on a film they have just seen about the American Revolution. Finding commercial materials easy enough for the students to read is frequently a problem.

In a Los Angeles project, junior high school students who are poor readers—in this case defined as 2 years below grade level in reading—are in a core program where they are taught reading, math, and social studies by teachers who have had training in reading. Classes are kept small and many audiovisual devices are used to capture the students' interests. Since material was scarce for such a project, the teachers have developed games, slides, pictures for overhead projectors, and tapes to teach their subjects to the poor readers.

Sometimes a simple idea works. A seventh-grade teacher in Tulsa, Oklahoma, accidentally stumbled on an answer to the dilemma of whether children are poor readers because they don't read or whether they don't read because they are poor readers. The teacher used a proverb one day to illustrate something she was talking about. The students suggested they look for other proverbs. Bringing in newspaper clippings and using stories they heard on the radio or television, the students showed great ingenuity in using old proverbs to talk about current events. The teacher thought the enthusiasm would last about a week, but the students never tired of it. An immediate result was increased use of oral language in class which, in turn, led to more reading.

The Reading Aids Program in San Bernardino, California, is based on the premise that every teacher is responsible, in some measure, for the teaching of reading. Knowing that junior high school teachers have little training in the teaching of reading, specialists prepared kits for each of 10 subject areas. The kits, with detailed instructions on their use, include tapes, acetates, worksheets, and evaluation sheets. Subject matter of the 10 kits is related to classroom instruction and deals with such topics as vocabulary, meaningful reading, dictionary usage, study skills, and word analysis skills. The assumption is that the teacher knows the subject matter but not how to present it for poor readers. The materials in the kit are designed to help with the presentation.

Several schools such as Cleveland, Ohio, have programs to discourage high school students from dropping out. One way of doing this is to place reading instruction in a large time block with social studies, in which part of the time is spent in reading skills instruction and part in studying multilevel content materials especially selected for the program. The content materials are vocationally oriented, giving students information about occupations and helping them to fit their interests and abilities into possible occupational areas. Reading instruction deals with skill building, emphasizing the need for basic skill mastery as a preface to vocational success.

In those schools where there is a school library, the librarian can be of great help to the classroom teacher in providing books and other supplementary materials that will capitalize on the interests of students. In some cities, the public libraries will also help.

Working With Individuals to Correct Reading Problems—Program structures often give the impression that most of the corrective activity can be accomplished with large or small groups. To some extent this is true, for classroom correction is aimed at identifying the gross skill deficiencies of children and of making efficient use of groups where that is possible in order to correct deficiency. Increasing emphasis, however, is being placed upon individual attention even within groups where it is imperative that a teacher develop an individual profile for those who are having difficulty. The authors have discovered some highly successful ways of organizing for individual correction and report those techniques in the following paragraph.

In order to correct the gross skill deficiencies of a reader, the classroom teacher must be aware of his reading levels, interests, and personal adjustments. Informal reading inventories and standardized survey and diagnostic tests are commonly used methods for determining reading levels. Interests and personal adjustment characteristics can be discovered by observing children during class activities, interviewing

them, and asking them to complete interest inventories. The child's self-esteem, so often damaged by failure in reading, improves with his recognition that the teacher has set up an individual program for him.

Planning Structure and Organization of Daily Program

Usually, several children in the classroom will be involved in the corrective program on a rather regular basis. The teacher should set up routines for these children and for any others who may become involved in corrective activity on an occasional basis. Once the teacher has decided who is going to participate in the corrective reading program, he can make the necessary classroom and time adjustments to carry out the program. Here are some hints for scheduling that might be helpful:

- A planning period with the children should be provided for each day. During this time the planning serves a dual purpose. It motivates the children, enticing them to the activities which lie ahead, and also informs the class as a whole of the activities for which to prepare. Included in this planning period should be—

  (a) Discussion of who needs to select new materials and when they will do it. During this time the teacher can show new materials, activities, books, magazines, etc.

  (b) Discussion and planning of who will be working alone and with others, so that the room can be properly arranged and supplies provided. Plan independent reading activities.

  (c) Discussion and solving (if possible) of any pertinent problems concerning routine, such as problems with traffic around book shelves, etc.

  (d) Arrangements for conferences, consultations, and individual assignments. Following this planning, each child should know exactly what he is to do during the reading period. Activities can be listed on a chart for easy review.

- A sharing period may be included. Some teachers find it quite helpful to have problem readers briefly discuss what they have learned, thereby letting all problem readers know that they are not the only ones having trouble. The teacher may want to schedule this once a week.

- A block of time must be allotted for the self-selection of books. The purpose of this is again to emphasize the individuality of the corrective program. Students may have some time during corrective activity to work independently while the teacher holds conferences with others, or they may simply use the self-selected books during other times of the day. An important factor in the self-selection period, however, is to have a number of books available with reading levels at which students can read independently.

- An evaluation period or summary period should be provided so that the children and the teachers can record their daily progress in their own files. This also provides the opportunity to identify future needs and perhaps to informally appraise the activities for that day.

Planning for and during all these periods is essential to alleviate many behavioral problems that could arise. The exact character and nature of the teaching schedule, however, will depend entirely upon the needs of the children and the purposes of instruction.

Conferences

Individual conferences with each youngster are the high points in the corrective reading program. A one-to-one relationship of teacher and child is the best way to meet individual differences.

Conferences can be initiated in the first year, using an individualized language experience story approach for a beginning. As the children begin to read books, conferences can be used to take a representative sample of the child's reading. These sessions should be utilized also for individual instruction. The ways of organizing these sessions are numerous, yet there are some general principles and procedures which can be followed for effective conferences.

1. Establish a time limit—not necessarily for rigid enforcement, but as a general goal for the teacher. Lengthy comprehensive conferences might be necessary at first to help initiate the program. An often-suggested time limit is from 3 to 10 minutes, averaging 5 minutes per child. Some conferences will demand more time, however.

2. Some youngsters might confer with the teacher daily, while others might require only four or five conferences per month.

3. The conferences can be on a voluntary basis, with the youngsters signing up on a schedule for their time, or they can be informally arranged: "Who needs to see me today?" They can also be set up on a routine basis, using an established cycle of conferences which rotates.

4. Teachers and children can schedule their conferences during the planning period or, if a sign-up sheet is provided, anytime during the day.

5. The conference with individual children should be relaxed, yet purposeful. This is a time to gain information, share, engage in personalized teaching, evaluate and plan for the next step in reading. It should be a warm, intimate time for the teacher and the child. During the conference the teacher should—

   - Discuss with the child the choice of books being read.
   - Discover the child's feelings toward the book.
   - Hear the child read orally.
   - Evaluate and work on deriving word meanings.
   - Evaluate word attack skills and work on those needing improvement.
   - Work on development of specific skills.
   - Check on children's understanding of specific passages or sections of the book.
   - Make assignments or plans to develop a specific skill.
   - Make assignments or plans to reinforce a specific skill.

6. The individual conference should leave the child eager and ready for the next conference. Praise or some positive comment concerning the child's progress should be included, especially at the end of the conference.

7. Occasionally, it might be convenient or appropriate to group from two to five children together. This can be done if a few students read the same book at the same time. Ideas and interpretations can be shared in a group conference arrangement. Some teachers suggest a small group conference plan for primary children. In this arrangement, the children gather around the teacher, each reading his own self-selected book at his own rate. One child at a time from this group then receives individual reading guidance from the teacher for a few minutes. That child becomes a member of the group again while the teacher gives her attention to another member of the same group for a short period of time. This continues until everyone in the group has conferred with the teacher or until the reading period is over. The children may begin as a group all at the same time, or may voluntarily come and go from the group.

Recordkeeping

Recordkeeping is an important part of any instructional program. In a classroom correction program, where many activities go on at one time, it becomes especially important if the program is to run smoothly and if children's needs are to be served. Both teacher and children can be involved in this task with the teacher concentrating on evaluation of progress and needs and the children concentrating on recording tasks completed.

The teacher should keep detailed records which will give him a general picture of the child—his interests, abilities, and attitudes. This would include the results of mental tests, reading tests of achievement and capacity, and results of oral reading tests. The physical and mental health of a child should also be noted. Cumulative record information such as the child's interests, strengths, and limitations is helpful as well. In this more specific record, approaches and techniques found to be effective when working with the youngster should be recorded along with notations regarding specific needs and types of help needed and given.

Less formal records might include checksheets of dates when individual conferences are held, summaries of needs of individuals as shown through conferences or through observation during class activities, and notations of general class needs.

A checklist of conference dates might contain a list of children in the class and notations of dates on which conferences are held.

Conference Schedule

Name	Conference Number							
	1	2	3	4	5	6	7	8
1. Aaron, John	9/21	4/28						
2. Harris, June	9/22	9/25	9/29					
3. Smith, Regina								

A glance at such a record will help the teacher plan individual conferences and give him an idea of the amount of time he needs to spend in conferences in a given day or week.

The teacher should take careful notes during an individual conference. The recordkeeping system used by the teacher should be simple yet functional—recording the overall skills, attitudes, and understandings of the child. Record cards, checklists, or a looseleaf notebook can be used effectively. Notes recorded are valuable in planning for the next conference and for group work. The teacher might use a form such as that reproduced below for keeping track of progress and further need.

Name					
Book Title	Grade Level	Skill Development	Analysis Difficulty	Ability	Assignment

After conferences have been held it is often helpful to go back over the notes recorded and summarize the needs revealed. This summary could take a form like the following:

Group work with:

Initial consonants	Oral reading
1.	1.
2.	2.
3.	3.
4.	4.

Individual work:

1. J. Jones—reading for details
2.
3.
4.

Regardless of the particular forms used in recordkeeping, the procedures should be kept as simple as possible. Using a code or a personal shorthand also helps in recording during the conference. The records need note not only reading skills or needs but also such areas as spelling or science.

Recordkeeping by the Child

The records that each child keeps enable him to follow his own reading progress. The youngsters readily respond to this responsibility, and their records prove to be a valuable aid during individual conferences as they provide the teacher with insight into each child's reading pattern.

Recordkeeping must not be overemphasized; however, the children should record every book they read in their personal files. Simplicity is the key in children's records. These records should not be so demanding that a child would prefer not to read, yet they should allow for personal reactions. Some authorities suggest that the forms of children's records be changed frequently. Their records for the most part should record what and how many books were read and the specific skill tasks completed.

Ways for children to record their reading are many and varied. Some suggestions are—

- Make scrapbooks of illustrations and summaries of stories.
- Make charts displaying various types of material read.
- Make a "collection box" of "souvenirs" from good stories—such as new words learned, funny incidents, etc.
- Make charts to evaluate the stories read according to criteria set by the class.
- At the beginning of a program, use a weekly reading survey in which the child accounts for the number of pages read each day, the approximate time spent browsing, reading books, newspapers, etc. This helps "time wasters" get into the reading habit.
- Put each child's name on a divider in a file box. Cards are available with categories of books listed on them (fiction, history, science, biography, humor, animal stories, poetry, newspaper, magazine). As the child completes a book he fills out the card with the name of the book, author, date finished, identification of important characters, and a sentence or two about the plot, new words, and meanings. The card is filed behind his divider.

Name: Date Fiction

Title:

Author:

Main characters:

If preferred, summaries of this type could be done on record sheets for a looseleaf folder.

Skill Development

The success of a youngster learning to read depends primarily on how effectively he learns the essential reading skills. The teaching of skills in the primary grades is not, however, the main goal. The purpose of teaching skills is to help the child read better and enjoy reading. The extent to which youngsters read on their own, independently, indicates the success of instruction.

Skill getting is an internal, active, and individual process. The procedure involves meeting the skill, learning what it is and does, practicing the skill by performing it, succeeding, or further correcting the skill until success is evidenced.

The teaching of skills should not be isolated from the reading act itself. For this reason most of the skill instruction in individualized reading is handled in individual conferences when the child shows a need for it. Reading specialists differ in their opinions of the proper sequence of skill development. By checking through various basal textbook manuals a teacher can discover the variety of these opinions. It might be helpful, though, for the teacher to have at least one basal textbook manual on hand to use as a guide in developing skills. A list of specific reading skills and sample activities for their developing are discussed in following sections. A checklist should be kept in the records of each child so that, as a skill is mastered, the teacher can check it off the list and proceed to others.

Skill Evaluation

In evaluating whether skills have been acquired, and the progress of the child, one should acquire as much information as possible prior to making any judgment. Information may be gained in many ways—formally as well as informally.

Children may be evaluated through an analysis of—

- Informal and standardized test results
- Checklists of skills (see sample checklists in following section)
- Inventories of the child's needs
- Child's oral reading
- Teacher observations of child's attitudes, interests, and purposes for reading, and how much the child reads
- Teacher-pupil conference records
- Child's self-evaluation
- Child's independent reading record
- Tape recordings of the child's reading early in the year as compared to subsequent tapes noting progress.

Conclusion

An individualized corrective reading program is flexible by nature. There is no step-by-step program fixed for each school day. Each child is an individual, with individual problems, and requires an individualized method of instruction. Variety in both methods and materials is inherent in this personalized plan. The variety of ideas presented here serves only to supplement the ideas that an individual teacher may have. The teacher should consider this as a flexible guide that can be adapted to any system of reading instruction.

CLASSROOM TECHNIQUES FOR CORRECTING SPECIFIC PROBLEMS

Once the teacher has identified a specific reading problem and has organized his classroom so that he can conduct corrective activities, he should start to treat the problem. Adequate treatment demands an adequate supply of materials, the application of appropriate corrective techniques, and, naturally, that which underlies all of it, appropriate training for the teacher.

Teachers have many handicaps when it comes to reading instruction. First of all, their own training may have been inadequate. Then, too often they are given the job without being given the tools. Materials are skimpy, classes are crowded, help is scarce, and administrators do not always supply the needed support. Reading consultants sometimes can be seen by appointment only, so that the moment when specific help is needed slips past. However, ways are being found to face these specific handicaps.

Teacher Preparation

Most graduates in elementary education have had more training in teaching music, art, and physical education than they have had in the teaching of reading (Austin, 1961, p. 23). Secondary school teachers might very well have had no training in the teaching of reading or even in the recognition of reading difficulties.

This may be surprising in view of the fact that elementary school teachers spend a great deal of time in the teaching of reading, and secondary school teachers also are vitally concerned with reading in various content areas. These realities of deficiency must be faced by adjusting preservice and inservice training.

To make up for deficiencies in background, teachers have several avenues open--course work, reading professional books, experience in a reading laboratory or clinic, and inservice training. More and more schools are providing inservice training and some are even paying teachers by means of released time during the school day or by giving them additional money for participating in inservice training after school or on Saturdays. Teachers and teacher organizations should pursue ways of obtaining needed inservice experience so that a more effective job in correction of reading problems can be accomplished.

In communities with colleges, school systems may often cooperate with college authorities in offering special courses useful to teachers of reading. In *San Diego, California,* several college level courses have been devised to help with the teaching of reading. Some are given in the public schools so the teachers do not have far to travel. Such courses can be tailored to meet the problems of a specific school or a specific district. For example, if a school has a large proportion of children for whom English is a second language, the course could concentrate on how to teach reading to them. There are correction problems that continue throughout the teaching process of this group of children.

Those communities which do not have colleges can often host off-campus courses from State universities or teachers colleges. This is especially beneficial where teachers can commute from other towns or school districts. In this way, teachers from a number of school systems can benefit from courses in teaching reading which, otherwise, would be out of their reach.

In most instances, however, the school system will want to devise training programs that are indigenous to the school district. A special curriculum for inservice training programs can be developed by a committee of teachers and supervisors or by the supervisory staff. Both local school people and outside consultants can then present demonstrations and lead discussions that will arrive at the kind of training and experience desirable. With specific local goals in mind, schools often conduct extended inservice programs on Saturdays or during the summer. In *Terre Haute, Indiana,* teachers may attend evening or Saturday workshop sessions on the educational problems of disadvantaged children. Teachers in *Tuscaloosa, Alabama,* attend a concentrated series of weekly meetings in the spring and a 6-week summer workshop. Focus on the program is on the upgrading of all reading instruction, particularly in schools which have many children from disadvantaged homes. The specific techniques demonstrated illustrate where problems are likely to arise in the teaching of reading and what the specific techniques are that will be beneficial in overcoming those problems.

Interest in inservice training can be increased by offering college credit. *Kenmore, New York,* has an inservice program in which elementary teachers attend a series of nine evening meetings during a semester and receive one university credit. Lectures by well-known reading specialists are supplemented by discussions in individual schools in the system. Teachers engage in projects concerned with methods used in correcting reading problems in their own classrooms. Their ideas, summaries of the meetings, and lists of materials recommended for classroom use are collected in an idea exchange booklet which is distributed to all who complete the course.

Relieving teachers of classroom duties for inservice training is a third means of planning successful programs. *Buffalo, New York,* maintains a Reading Center for improving the teaching of reading through inservice training. The Center's staff of reading consultants conducts three types of inservice programs at the Center—a trainee program, workshops, and demonstrations. The trainee program is the most intensive. Each school term four classroom teachers become trainees, attending lectures and discussion sections and observing the administration of reading analysis. After several weeks of training the trainees take over the teaching of small groups of children who come to the Center for corrective work. At the end of the term the trainees return to their classrooms. Workshops, given after school 1 day a week for 5 weeks, are conducted at the Center for beginning and experienced teachers at different levels. All district public school teachers are invited. Demonstration classes are taught by Center consultants. Each term, two elementary classes spend every morning at the Center for 4 weeks. The trainees and other district teachers observe these classes. The consultants have a conference with observers preceding and following the observations.

Dougherty County, Georgia, is another school system which releases teachers from classroom duties for inservice training in reading. Each of 14 schools releases one teacher at a time for 6-month training sessions at the county's Reading Clinic in Albany. The first 4 to 6 weeks are spent in discussion with psychologists, professors, an optometrist, and clinicians in preparing for case work. Throughout the training the theory and practice of diagnosis and remedial instruction are well integrated. After the initial training, teachers are assigned split day schedules—half working mornings and half afternoons—with corrective and remedial cases. The teachers spend the other half day in their respective schools teaching developmental and remedial reading classes and acting as resource teachers.

Teachers may also use some of the excellent books that are available on corrective reading in the classroom, such as *Diagnostic Teaching of Reading* by Ruth Strang, *The Teachers Guide for Remedial Reading* by Kottmeyer, *Corrective and Remedial Teaching* by Otto and McMenemy. Reading specialists and consultants can also be of help to teachers and administrators in finding and recommending especially helpful books for special needs. Groups of teachers interested in this problem could group themselves into discussion meetings in order to encourage each other to read in this area.

Specific Reading Skills

Successful techniques for correcting reading difficulty appear to have three common characteristics:

1. Teachers have definite goals of instruction in mind.
2. Reading is associated with pupil experience.
3. Planned sequential skill development is provided.

Corrective techniques vary widely. No good teacher uses only one technique. A multiple approach to teaching reading benefits the students with their varying abilities and varying styles of learning.

The goals that a teacher sets may be related to word recognition, such as identifying words that begin with the consonant digraph *ch,* or they may be related to such less easily measured things as lack of experience, lack of motivation to learn, or lack of concepts to deal with the reading at hand.

One of the techniques that classroom teachers in growing numbers are using, especially where there is evidence of some cultural disadvantagement, is the technique known as the language experience approach. This technique takes advantage of what the child knows in order to get him to talk and then to interest him in reading about what has already captured his interest.

Probably the simplest form of language experience is the show-and-tell period widely used in the elementary schools. The child brings something to class that he has found or seen and tells the class about it. The purpose is two-fold: to make the child more observant, and to get him talking in a way that will interest his peers. The class ordinarily will join in a discussion of the subjects brought up. For many children, a show-and-tell experience will be the first time they have had an audience interested in what they have to say. They find out that language is a tool to capture the attention of others, that it is something useful.

Children from limited or deprived backgrounds—and this, by no means, describes only the poor—have little to talk about. The field trip has become a prime instrument to extend the language experiences of these children.

Field trips require a great deal of planning if they are to be more than outings. *San Francisco* is an example of a school system that has made the field trip a true teaching device.

Sites for field trips are carefully chosen to fit into the curriculum, with one class concentrating on becoming acquainted with the city, another with occupational possibilities, another with cultural offerings, and still another with nature study. Teachers, administrators, and reading specialists plan the trips by visiting selected sites before the children do. They prepare for the visits by securing reinforcement materials from the audiovisual department and school library, and by arranging for resource speakers to tell the children more about the places to be visited. Children are allowed to express choices of places they want to visit and follow up their field trips with essays, plays, language experience charts, or scrapbooks telling of their experiences. Parents are invited to accompany children on the field trips in an effort to enlist their interest in their children's learning activities. This also provides the teacher with further supervision for the group and is often educational for the parents as well as for the children.

Field trips are effective. Children acquire a common set of experiences about which they can converse; they become more aware of things around them as they develop observational powers.

Vocabularies grow. Use of color, details, and arrangement in art increases. Social skills and attitudes improve.

Activities To Teach Specific Reading Skills

Classroom teachers often want to know how to correct a specific skill. An essential feature in specific diagnosis and correction is to have established in one's mind a rather precise sequence of reading skills against which a student may be evaluated, and through which the teacher can encourage the student to proceed. A sample of such a list of skills is given below.

Perceptual Reading Skills

Auditory Skills

- Matching rhyming words
- Identifying consonant sounds
- Identifying vowel sounds
- Hearing word variants
- Recognizing syllable length
- Listening for accent

Visual Skills

- Noticing likenesses and differences
- Noticing differences in upper and lower case and between letters
- Increasing eye-span
- Developing spacial discrimination

Motor Skills

- Develping left-right eye movement
- Developing hand-eye coordination
- Developing motor awareness and coordination

Word Identification Skills

Sight Vocabulary

Phonic Analysis Skills

- Recognizing consonant sounds
- Recognizing consonant blends
- Recognizing consonant digraphs
- Recognizing vowel sounds
- Recognizing vowel diphthongs
- Recognizing vowel digraphs

Structural Analysis Skills

- Recognizing affixes
- Recognizing compound words
- Recognizing roots
- Recognizing contractions

Context Clue Skills

- Using definition clues
- Using experience clues
- Using comparison clues
- Using synonym clues
- Using familiar expression clues
- Using summary clues
- Using reflection of mood clues

Syllabication Skills

- Recognizing syllables
- Using syllabication generalizations
- Recognizing accent

Comprehension Skills

- Matching words and pictures
- Recognizing meaningful phonograms
- Matching definitions and word symbols
- Recognizing antonyms, synonyms, and homonyms
- Seeing literal and interpretive meanings
- Using context clues
- Recognizing meaning in larger units—sentence, passage, chapter
- Recognizing main idea and supporting detail
- Recognizing sequence
- Making generalizations and conclusions
- Following directions

Comprehension Rate

- Using correct left-right eye movement
- Using little or no regression
- Using little or no vocalizing or subvocalizing
- Using correct phrasing to read
- Adjusting rate to purpose
- Rapid recognition of sight vocabulary
- Using various word attack techniques meeting his own needs

Oral Reading

- Adjusting rate of purpose
- Using phrasing to read
- Using sufficient eye-voice span to read
- Using pleasing pitch and volume
- Enunciating correctly
- Pronouncing correctly
- Using punctuation correctly
- Being a relaxed reader

Word Attack Skills Checklist

Name_____

Grade_____ Age_____ Date_____

Skill	Mastery		
	Poor	Average	Good
Recognition of basic sight vocabulary			
Ability to sound out new word			
Recognition of consonant sounds			
Recognition of vowel sounds			
Knowledge of syllabication			
Ability to analyze word structure			
Understanding of syllabication			
Understanding of root words			
Understanding of prefixes			
Understanding of suffixes			
Ability to use context clues			
Ability to supply synonyms and antonyms			
Ability to use a dictionary			

Comprehension Skills Checklist

Name_____

Grade_____ Age_____ Date_____

Skill	Mastery		
	Poor	Average	Good
Ability to understand mean			
Word			
Sentences			
Paragraph			
Ability to recall main ideas			
Ability to give supporting ideas			
Ability to retell a story in sequence			
Ability to draw conclusions from given facts			
Ability to evaluate material read			
Ability to relate reading to experience			
Ability to use sources of information			
Tables of contents			
Dictionary			
Maps			
Index			
Ability to make comparisons between two or more versions of a story			

Oral Reading Checklist

Name _____

Grade _____ Age _____ Date _____

Skill	Mastery		
	Poor	Average	Good
Good reading posture			
Ability to utilize word attack skills			
Sounding out new words			
Pronouncing words correctly			
Using structural parts			
Using combined methods of word attack			
Ability to phrase meaningfully			
Ability to recognize and use punctuation symbols			
Ability to identify main ideas			
Ability to read fluently and enunciate clearly			
Ability to convey meaning and feeling to listeners			

Study Skills

Organizational Skills

- Arranging in alphabetical order
- Interpreting diacritical marks, symbols, and abbreviations
- Using the table of contents
- Taking good notes
- Using the index
- Verifying statements
- Developing a sense of sequence
- Using summarizing and outlining
- Synthesizing materials from several sources
- Organizing and reporting information

Library Skills

- Knowing the arrangement of the library
- Using the card catalog
- Using the vertical files
- Using the dictionary and glossary
- Using the encyclopedia
- Using the atlas
- Using the *Reader's Guide*

Interpretation Skills

- Using pictures for information
- Interpreting graphs
- Interpreting diagrams
- Using time lines
- Interpreting maps

Interpretation and Appreciation Reading Skills

- Inferring and concluding
- Recognizing the author's purpose
- Recognizing the difference between fact and opinion
- Recognizing the mood of the story
- Recognizing figurative language
- Seeing cause and effect relationships
- Knowing literary styles

In many instances, teachers will have to create their own exercises in order to give individual instruction in a specific skill. Teachers should not have to create exercises for all students, however, as many fine instructional materials are available in most of these areas. Given below are some samples of the kinds of activities that can be used to teach some of the specific skills listed above. For a more complete picture of what can be done, refer to the chapter entitled *Treating Reading Disabilities—The Specialist's Role.*

Auditory Skills—
Matching Rhyming Words

On the left side of the page, display pictures of objects which exemplify the sound being taught; on the right side, display pictures of rhyming words. The children are to draw a line to the rhyming object. This correctional procedure can usually be found in worksheets and can be used by a group the size of a normal class.

Auditory Skills—
Identifying Consonant Sounds

Each child receives a worksheet with a playground scene on it. Many objects are displayed in the picture; most of the objects start with initial consonant sounds already studied. With a red pencil, all the objects beginning with_____are marked. With a blue pencil all the objects beginning with_____are marked. Only two or three sounds should be tested at once; however, the picture can be used again to test other sounds. This correctional procedure can usually be found in worksheets and can be used by a group the size of a normal class.

Auditory Skills—
Identifying Vowel Sounds

The children skim their readers for words that fit into certain categories established by the teacher. The categories are determined by the vowel sound the teacher wants to stress, for example, the long sound_____; the short sound of_____; the *r*-controlled sound of_____. This correctional procedure can usually be found in worksheets and can be used by a group the size of a normal class.

Auditory Skills—
Recognizing Syllable Length

Give a list of mixed words containing one, two, and three syllable words. The children are to unscramble the words and put them into three columns, according to the number of syllables per word. Then they are to label the columns one-, two-, and three-syllable words. This correctional procedure can usually be found in worksheets and can be used by a group the size of a normal class.

Visual Skills—
Noticing Likenesses and Differences

On a worksheet with pairs of similar and often confused words, as the teacher reads sentences containing the words the children are to underline the correct word from the pair. Example: quiet-quite, deer-dear, palace-place, throat-throne. This correctional procedure can usually be found in worksheets and can be used by a group the size of a normal class.

Visual Skills—
Developing Special Discrimination
Horizontal Sequence

Display three objects to the children and name each as the first, next, and last object. Using three different objects, have them locate the first, next, and last objects from left to right. This involves discussion or a similar activity for a small group.

Motor Skills—
Developing Hand-Eye Coordination

Some developmental activities which will enhance visual-motor coordination are the following: cutting, painting, pasting, tracing, finger games, coloring, model making, bead stringing, and block building. This involves discussion or similar activity for a smaller group.

Sight Vocabulary—
Developing Sight Vocabulary

This game is played like Bingo. Words are written in columns and rows. The children cover the words pronounced by the teacher; and the first child to completely cover a column or row is the winner.

Structural Analysis—
Recognizing Affixes

After reviewing rules about plurals, present the children with a list of representative nouns. The children are to write the root word next to the given plural, then state in their own words the rule governing that root word and its plural. This correctional procedure can usually be found in worksheets and can be used by a group the size of a normal class.

Context Clues—
Using Context Clues

Present a short story of one paragraph with some words left out. The children are to read each sentence and complete it with their own words or those from a given list. Different types of context clues may be exhibited in each sentence. This correctional procedure can usually be found in worksheets and can be used by a group the size of a normal class.

Syllabication Generalizations—
Using Syllabication Generalizations

After several syllabication generalizations have been studied or reviewed, present a list of words for the child to divide. Have him letter the divided word with the correct rule governing its division. This diagnostic and correctional procedure is designed for an individual.

Comprehension—
Matching Definitions and Word Symbols

Prepare a worksheet on which children must match the word and its definition. The choice of words and definitions depends on the grade level of the group. This correctional procedure can usually be found in worksheets and can be used by a group the size of a normal class.

Comprehension—
Seeing Literal and Interpretive Meanings

Prepare questions to be presented before the students read. These questions should provoke thought while reading. Some sample questions which enhance interpretation are: "What did he mean by_____?" "Do you think that this should have happened?" "What makes this a good example of _____(some literary style)?" "Compare these two characters." "Which character displayed the most courage?" and so on. This correctional procedure can usually be found in worksheets and can be used by a group the size of a normal class.

Comprehension Skills—
Recognizing Main Idea and Support Detail

After the children have read a story, the teacher writes sentences on the board that show main ideas and detail from the reading. Through discussion the children distinguish which are the main ideas and which are the supporting details. Finally, each child arranges on a sheet of paper the main ideas in their proper sequence. This correctional procedure can usually be found in worksheets and can be used by a group the size of a normal class.

Comprehension—
Following Directions

Present a worksheet where directions vary according to topics that were studied in each subject for the past week. The list of directions is to be completed but done in fun. Some ideas for directions are as follows:

Write the page number that tells where ants get their food. (Science)
Trace a picture of an ant. (Science)
Copy the definition of a verb. (English)
Give an example of a verb used in a sentence. (English)
From your notebook, copy three new words learned this week in Spanish.
Draw a Pilgrim boy or girl. (Social Studies)
State three reasons why we still observe Thanksgiving. (Social Studies)

This correctional procedure can usually be found in worksheets and can be used by a group the size of a normal class.

Comprehension Rate—
Using Little or No Regressions

Using a cover card, the child is to read from left to right across a page. As he reads, he uses a cover card to block out what has been read. This sample is a diagnostic and correctional procedure designed for an individual.

Comprehension Rate—
Adjusting to Purpose

Questions involving material found in the index, table of contents, and chapter headings make good material to scan for answers. This correctional procedure can usually be found in worksheets and can be used by a group the size of a normal class.

Oral Reading Skills—
Enunciating Correctly

Study word endings, such as *ing, d,* and *t.* Practice words on flashcards can be used for individual or class help:

chattering	brought	quiet
coming	feed	slid
fishing	dived	caught
talking	crept	carried
stirring	spent	tonight
falling	listened	right
blowing	chattered	around
making	watched	tugged
growling	rattled	that
pushing	waited	pulled

This generally involves discussion or similar activity in a smaller group.

Auditory and Visual Training

Many children have auditory or visual discrimination problems which adversely affect their ability to read. The classroom teacher can recognize some of these problems by observing children's behavior in the classroom.

Poor word recognition, narrow attention span, reversals, and word-by-word reading, especially if coupled with bloodshot, swollen, or teary eyes, complaints of dizziness, blurred vision, or soreness, may be symptoms of visual difficulty. Difficulties in sound differentiations, following spoken directions, or classroom inattentiveness may indicate hearing or auditory discrimination problems. The teacher, after observing such behavior, should make an informal diagnosis of auditory and visual discrimination and follow up with specific treatment. If diagnosis and treatment in the classroom do not prove successful, or if the problem appears too severe for classroom handling, the teacher should refer the child to a specialist for help.

Classroom diagnosis of auditory and visual discrimination problems can be done through teacher-devised tests or formal tests. To test auditory discrimination, a teacher might ask a child to listen to a series of words (e.g., *bat, bet, bit, but*) and describe likenesses or differences in the words (e.g., change in middle vowel). The *Wepman Auditory Discrimination Test* includes exercises similar to the example given and can be administered easily by the classroom teacher. In testing visual discrimination, the teacher might ask a child to choose two like figures from a series (e.g., △ □ O △) or ask him to reproduce a figure himself (e.g., □O). This kind of exercise appears in reading readiness tests and in the *Frostig Visual Perception Test* which, like the *Wepman,* can be administered in the classroom.

Once diagnosis of auditory or visual discrimination problems has been made, the classroom teacher can devise exercises similar to the test items to help correct problems. Such exercises should be based on diagnostic findings and should concentrate on developing skills through exercises similar to those used in diagnosis.

Given below are some methods for treating auditory and visual problems.

- Many classrooms now have listening posts or corners where the children can listen to tapes or records to improve their auditory perception. The use of pictures, films, and filmstrips can be incorporated in classroom teaching to improve visual perception.
- Filmstrips may be used to teach specific skills. For example, to teach time filmstrips, the class might be shown a single frame of a filmstrip they saw the day before. The teacher then asks the class to tell what happened just *before* and just *after* that picture.
- Games may be used for both visual and auditory perception. Many of these are devised by teachers with specific goals in mind. For example, pictures are shown of various objects whose only relationship might be that they begin with the same consonant. The children who pick out the pictures and write down the words beginning with the same letter win the game.
- Controlled readers are used to improve eye movements. The speed of the machine is geared to the child's ability and gradually moved up so that he is forced to use fewer eye movements in order to keep up with the story.
- Many companies have now put stories on tapes. Teachers also can tell stories into tape machines and children themselves will dictate their own stories. Listening to these tapes and then answering questions about what they have heard will help improve listening skills.

The Language Improvement Project at the Fairlawn School in *Santa Barbara, California,* puts great emphasis on the development of listening skills. A listening center—consisting of a cart, 12 headsets, a phonograph, and a tape recorder—is rolled into the classroom and is ready for use. The Fairlawn listening centers are used in a number of ways by students: to listen to recorded stories from their textbooks, following along; to listen to teacher-made tapes, some of which may be dictated instructions for drill in specific skills; to record oral reading, passing along the microphone in turn and then listening to their own performances; to make a group reading of a play; to record their experiences on a field trip; and to hear their own improvement by listening to tapes made 6 months earlier and comparing them with tapes of the same material recently made.

Teaching for Skills

Reading specialists and other resource teachers can help the classroom teacher by diagnosing the reading difficulties a student is having; demonstrating,

through teaching classroom lessons or during inservice training, how to gear instruction to specific reading problems; and locating and demonstrating new materials and techniques.

In *San Francisco,* a special program was aimed at children needing help in reading. First, an informal reading inventory was devised to help teachers determine students' reading problems. Teachers were encouraged to use a multimedia approach—newspapers, trade books, magazines, filmstrips, radio and television programs, resource speakers, records, tape recordings, and field trips in order to "tune in" to students' interests in motivating them to read. Listening skills were emphasized through the exchange of verbal ideas, discussion, and reporting. Reading specialists singled out materials that would teach specific skills, such as phonics, blending, final consonants, time and space relationships, and correct use of prepositions.

Games introduce an element of fun into classroom work and are helpful in reinforcing specific skills. Both elementary and secondary students enjoy playing commercially developed word games in class. Card games, such as word rummy, and word bingo games provide fun and motivation for elementary school children. More advanced games can be used effectively in secondary classrooms with some adaptation by the teacher so that groups of students can play against one another.

In addition to commercially available games, teachers can devise game situations for classes. Young children might find three- or four-word cards on their chairs when they come into class. The children use these word cards to make sentences. Variations of anagrams, where letters are used to build and change words, can be effective with both elementary and secondary students. Telephoning each other on play phones can encourage the use of language as well as social skills. Elementary school children can build word collections by writing each new word on a card and filing it for later use in language experience charts. Secondary students can use the same method for building specific vocabularies for content area courses. Classification can be learned by finding newspaper and magazine stories that have to do with pets, cars, sports, or whatever interests a child most. Stories in trade books that concentrate on certain sounds a child is having trouble with can be used profitably in building needed understanding and skills.

Materials and Books

Selection of books and other materials for instructional and independent reading should be made with the children's interests and abilities in mind. As commercial materials and books become more varied and more helpful, the selection task of the teacher becomes more difficult. By consulting reading coordinators and using reference sources on children's literature, classroom teachers can become more familiar with the content and reading levels of children's books. School librarians can assist teachers by providing sources of information on new books.

There are a number of references which list books available for individual reading programs, and many of these are constantly updated to keep teachers and librarians acquainted with outstanding publications. The 1966 revision of *Good Reading for Poor Readers* by Spache discusses book choices for specific children and includes lists of books, workbooks, and games for use in individualized reading programs. H. W. Wilson's *Children's Catalog* is a reference tool. Published annually, it gives summaries of books in all fields, estimates their difficulty, and assesses their literary value. Another reference available through school librarians is *The Horn Book Magazine,* which is published bimonthly and contains reviews of outstanding children's books. Teachers can also consult such professional journals as *Elementary English* and the *English Journal* for information on new instructional materials for classroom use.

The school reading coordinator is a vital source of information on material for use in individualized reading programs. He investigates new materials as he receives information on them from publishers, and can relay this information to classroom and special reading teachers. He can also plan and demonstrate innovative materials for classroom teachers.

Still, teachers say, commercial materials are too few; they lack realism; they don't motivate the nonreader; they are geared for girls rather than boys; their vocabularies are too controlled or too extensive; the materials contain too few phonics practices; and they are unsuitable for independent reading programs. To overcome any or all of these deficiencies, teachers are creating their own materials. To surmount the problem of time to do this, teachers are sometimes released for a semester to work on a project, or they may devote a summer or evenings or weekends to creating their own teaching materials. More sharing of materials could be done, even of teacher-created materials.

Basal readers are often the only materials a teacher will use, and she may even ignore the accompanying teacher manual. Such resistance to change has to be

overcome, either through the prodding of the reading coordinator or principal or through convincing demonstrations of materials during inservice sessions.

Further use of the audiovisual coordinator and the school librarian can be made to supplement materials for the classroom.

Testing and Grouping

One of the difficulties in both testing and grouping children is an attitudinal problem. Some teachers tend to believe that, once a class is tested or grouped, it will remain so for all time. Children, of course, do not stand still, and both testing and grouping have to be continuing processes.

Even in a homogeneous setting, all children do not read at the same level, nor do they have the same specific skill needs. But too often teachers tend to think that, once grouping has been done, there is no further need for individualized instruction. Even a homogeneous class will have as many as four or five levels of reading ability; and individual children, at whatever level, will have specific reading problems. For these reasons teachers should create "fluid" groups within the classes, giving children the help they need in specific areas without consigning them to one group for all reading instruction.

Classroom teachers, aware that differences in skill abilities do exist, can help to build these abilities. The first effort should be to use skill checklists, such as those shown on the following pages, to single out skill weaknesses in children. Classroom observations of behavior in reading situations and of attitudes shown toward reading can be of great help in determining areas of difficulty. Formal testing of areas of difficulty discovered in daily observation and measurement can follow as needed.

Knowing what tests to use and how to use them will come only from special effort and from experience. Reading coordinators and other reading specialists in the school can help classroom teachers to find and use standardized tests. A semester's inservice training could be planned around classroom diagnosis of reading difficulty.

Evaluation and Communication

Whatever techniques and materials are tried, they should be evaluated. Although teacher observation can be used to sense class enthusiasm for materials and techniques, discrete skills can best be tested by before-and-after evaluations. The school's reading coordinator or principal should be involved in setting up methods of evaluation.

One way of evaluating children's progress is to use checklists to measure skill abilities. A careful examination of such checklists, coupled with teacher observations of class participation and results of reading tests, will give the teacher a broad base upon which to evaluate progress.

Communicating with parents is also essential. In some cities, parents are actually involved in the curriculum by serving as paid or volunteer aides or tutors. In other places, parents accompany the children on field trips. Parental use of the school library is encouraged. Parents should be informed when a change in reading instruction is about to be tried, or they will have only the children's garbled versions of the experiment. Student demonstrations of methods and materials at PTA meetings and other parent gatherings help show what the schools are trying to do and how they are going about it.

San Bernardino, California, has a simple device to capture the interest of parents. The mothers and fathers are invited to the school to "hear your child on tape" or "see the pictures we took on our trip."

When home visits to explain the reading program have been undertaken, one of the clearest results has been a decrease in truancy—an indication of increased parental interest in the school.

TECHNIQUES FOR CLASSROOM DIAGNOSIS OF READING PROBLEMS

Definition of Terms

In describing the various types of reading instruction, educators commonly use three terms: *developmental, remedial,* and *corrective.*

Developmental instruction. Developmental reading instruction has the following characteristics: (1) The instructional starting point is the level at which the child is presently reading; (2) the child proceeds at his own developmental rate of accomplishment; and (3) reading instruction is sequential, i.e., follows a definite sequence of skills and activities. Unfortunately, many educators use the term *developmental* instruction in a limited way, that is, as sequential instruction given on one level (the average level of the class) and at one rate (the class's average rate of learning.

Corrective instruction. Corrective reading instruction, in addition to the three characteristics of

developmental instruction, has a more specific referent: instruction which is given to less severe cases of reading disability and is given by the classroom teacher in the classroom.

Remedial instruction. Remedial instruction includes the three characteristics of developmental instruction, but also refers more specifically to instruction which is given (1) to more severe cases of reading disability (children reading at least 2 years below capacity and/or grade level) and (2) by a reading specialist outside of the classroom—usually in a special classroom or a clinic.

Diagnostic Techniques Used in Classroom Correction

The classroom teacher's initial diagnosis of the child's reading difficulties has two major objectives: (1) To determine the child's instructional reading level, the level on which instruction should take place. Reading materials on a child's instructional level are neither too easy nor frustratingly difficult for him, yet these materials are just difficult enough so that the child can make reading progress under teacher guidance. (2) To determine the specific skills in which the child is deficient. Unless the diagnosis can determine particular skills, instruction may either give practice on skills already mastered or fail to give help on skills needed. Skill deficiencies must be pinpointed.

The classroom teacher can use the following techniques to diagnose a child's reading difficulties:

Group survey tests—Group survey tests normally provide measures of comprehension, vocabulary, and rate; but their main purpose is usually to provide a fairly adequate measure of the grade level at which a pupil reads. Hence, these tests can be used to reveal those children reading below grade level who may be candidates for either corrective or remedial instruction. Examples of group survey tests are the *Gates Primary Reading Tests* and the *Iowa Silent Reading Test.*

Those survey tests aimed primarily at determining a pupil's average reading grade also carry some diagnostic elements. There are other group tests, however, that are more analytical and more diagnostic than the group survey test. The purpose of these group diagnostic tests is to pinpoint skill deficiencies. Those that cover kindergarten through fourth grade usually measure reading readiness, visual and auditory discrimination, vocabulary, and story reading, or the comprehension of stories or paragraphs. Tests for grades four to eight usually measure word recognition, comprehension, vocabulary, rate, and word attack. In high school and college grades, the tests focus on measures of vocabulary, comprehension, rate, and word attack. Some typical examples of group diagnostic tests are the Dvorak-Van Wagenen *Diagnostic Examination of Silent Reading Abilities* for grades four to five, six to nine, and ten to thirteen; the Bond-Balow-Hoyt *New Developmental Reading Tests* for primary reading; and the Bond-Clymer-Hoyt *Developmental Reading Tests* for intermediate grade reading.

Teacher-made tests—An effective and widely used technique for diagnosing reading deficiencies is the teacher-made test. The most commonly used are those which, because they are testing only one or two factors, are short, simple, and often made up on the spot, i.e., when the teacher is working with a pupil. For instance, if a teacher wants to know if Johnny know how to blend the digraph *ch* he simply asks him to pronounce several words which begin or end with *ch.* If he wants to test his literal comprehension (recall of facts) he asks Johnny to read several paragraphs and then asks him factual questions about the paragraph. If he wants to know if he can divide words into syllables, he gives him a number of words to syllabicate.

Informal reading inventory—The informal reading inventory, which the teacher gives to individual students, is a longer, more complex test. A carefully graded series of basal readers can be used to construct an informal reading inventory. Selections of 100 to 200 words are chosen from each book in the series, taking three selections from each book, one from the beginning, one from the middle, and one near the end. For each of these selections a few questions focusing on ideas and facts should be constructed and presented to the pupil after he has read the selection. The pupil should be started at a relatively easy level, reading orally to the teacher and then answering the comprehension questions based upon the content. If he is unable to handle the first selection given to him, he should be moved back to an easier level. The child continues to read successively more difficult selections until the teacher determines his various reading levels and gains the appropriate diagnostic information. The levels are as follows:

Independent reading level—At this level the child can read comfortably without assistance from an outsider. It is the type of material that he would pick on his own and feel satisfied by his performance in reading it. As he reads orally he would probably make no more than one word pronunciation error out of 100 words and achieve a comprehension score of about

90 percent. Generally his oral reading would be conversational and well phrased. There would be little or no evidence of tension as he reads (Betts, 1946, p. 446).

Instructional level—This is the level at which pupils can make satisfactory progress under teacher guidance. The material, therefore, is challenging enough to cause the student to stumble and to need outside assistance in order to handle it with comfort. The instructional level is determined by a 95 percent accuracy in word recognition, and a comprehension score of at least 75 percent. The oral reading at this level should be generally tension-free and there should be evidence of proper phrasing and rhythm (Betts, 1946, p. 539).

Frustration level—The frustration level marks the point at which the child can no longer function adequately with the material. He makes so many errors and has such difficulty in comprehending what he reads that it is truly a frustrating experience. Usually the score the child achieves on a group silent reading test in class is a kind of frustration level, since he works at the test with high energy and concentration in his reading.

The selections that form the informal reading inventory can be administered to the child both in an oral reading exercise and in a silent reading exercise to see what differences there are. One of the primary reasons to have the child read orally is to give the teacher an opportunity to observe the phrasing and pronunciation skills he exhibits. In addition to determining the student's reading levels and gathering information about his comprehension ability through informal techniques, the teacher can, by using checklists such as the following and a + and - notation, develop a picture of the child's strengths and weaknesses.

General Reading Skills:
- _____Enunciation
- _____Adequate phrasing
- _____Word-by-word phrasing
- _____Head movements, following with finger, posture, distractibility, tenseness
- _____Word-recognition difficulties:
  - _____Reversals
  - _____Wrong beginning
  - _____Wrong middle
  - _____Wrong ending
- _____Word-recognition skills:
  - _____Use of context
  - _____Adequacy of sight vocabulary
- _____Other difficulties
  - _____Repetitions
  - _____Omissions
  - ___Substitutions
  - ___Other

Word Attack Skills:
- ___Blending skill
- ___Resorts to spelling attack
- ___No method of word analysis
- ___Recognition of familiar parts
- ___Recognition of parts of compound words
- ___Recognition of word roots
- ___Recognition of suffixes
- ___Recognition of prefixes
- ___Consonant sounds
- ___Vowel sounds

Other Relevant Data:
- ___Hearing status
- ___Visual status
- ___Speech difficulties
- ___Other physical difficulties
- ___Fluency in language usage
- ___Chief interests
- ___Ability to concentrate
- ___Persistence in tasks
- ___Emotional reactions (confident, shy, overaggressive, negativistic, cheerful, etc.)
- ___Attitudes (toward school, teacher, reading)
- ___Home environment
- ___Other observations

The following information can be obtained by watching the child as he reads silently from basic reader selections:

Name and grade level of book
Rate (words per minute)
Degree of comprehension
Vocalization (degree of lip movement, whispering, audible speech)
Finger pointing
Head movements
Signs of tenseness
Posture
Distractibility
Other habits

Observation in the classroom—Observation is a technique that can and should be employed in the classroom at all times. Even while instructing the class as a whole, a teacher can be noticing how the class and certain individuals are responding to the instruction.

A teacher easily identifies a student who cannot read: he avoids reading and gets better marks in subjects that do not require reading. Upon closer

observation, the teacher may discover difficulties in vocabulary, word recognition, and comprehension. From further observation and interviews he may infer that emotional difficulties also enter into the student's reading disability.

Observation is a basic technique. Requiring no extra time or materials it is employed every day by every teacher. Usually observations go unrecorded; they are used at the first opportunity to help the student.

While observation is excellent for understanding the way a student reads, it fails to tell *why* he reads as he does. One can only make inferences about the causes of the student's successes or failures.

Four specific principles to keep in mind when observing individuals are:

1. Since the student is always changing and growing, an observation that was made last year may not describe his present reading performance.
2. A teacher can observe only a small part of a student's total behavior. On the basis of such limited information, the teacher can make tentative generalizations about the student's reading.
3. Observations made by a teacher may tell more about the teacher than about the student. His first impression of the student, his philosophy of education, and many other factors may color what he sees.
4. Ideally, observations should be interpreted in conjunction with interview, test, and other data. However, observations often are the only data available at the moment, and sometimes action should not be deferred.

Analysis of Classroom Situations

Teachers are confronted daily with situations from which they can understand their students' reading. A detailed analysis of these situations serves as a guide to observation; it alerts the teacher to reactions or behavior which he might have overlooked otherwise. He may either start with the situation and describe the understanding he hopes to obtain from it, or start with the understanding and decide from which situations such understanding can be obtained. He should try to systematize his observations with checklists, thus making learning patterns more evident.

The following checklists show kinds of information about students' reading that may be obtained in different classroom situations. In the lower grades, students are given many opportunities to tell their experiences to others. From listening to his students, a teacher learns about their vocabulary and language patterns, their interests, and personality traits. Also important are comments about home conditions and attitudes. Some specific observations to check are:

Language abilities and vocabulary: meager___, rich___, accurate___
Sentence structure: incomplete sentences___, simple sentences___, complex sentences___
Imagination: creative___, bizarre___
Organization: recounted events in proper sequence___, well-organized___, disjointed___
Sense of humor: enjoyment of humor___, makes others laugh___

When students read aloud, the teacher has the opportunity to observe their word recognition skills, pronunciation, phrasing, and expression. The student often reveals his attitude toward reading—whether he reads with enjoyment, indifference, dislike, anxiety, resistance, or hostility. Dramatized reading gives an even better picture of the student's ability to read with expression, feeling, and meaning. Some specific observations are:

Method of word attack: sounds out words___, tries to analyze structure___, uses context clues ___
Word recognition problems: skips words___, reverses letters, words, phrases___, substitutes words___, guesses wildly___

Substitutions of words give the teacher valuable clues about the student's comprehension of the material he is reading. If he substitutes a word that makes sense in the context of the sentence, he is probably reading for meaning; however, if the word substituted makes no sense, he is merely pronouncing words with little understanding of what he reads. When a student comes to an unfamiliar word, the teacher should observe what kinds of words give him difficulty: common words, long words, words within his experience, or words foreign to him. The teacher should also observe how he goes about finding the meaning of unfamiliar words. Some specific observations are:

Phrasing: reads word by word___, reads in phrases or other thought units___, loses place easily___, reads clearly and with expression___

Comprehension: recognizes basic vocabulary at sight___, shows an understanding of material read___, sees relationships and sequences of ideas___, can discuss what he has read___, shows originality in interpretation___

A student's reading interest or level may be indicated by his selection of reading material in a free reading or library period. His behavior during silent reading indicates his power of concentration. (Is he merely daydreaming or is he really thinking about what he reads? If he is distracted, what caused it?) Some specific observations are:

Approach to books: leafs through many books ___, chooses quickly___; looks first at chapter titles and/or table of contents___, pictures___, printed pages___; tends to choose small books ___, large books___, one kind of book___, a particular author or series___, is rather uniform in choices___, chooses a variety of books___, chooses books at his own age level of interest___, below___, above___; takes books home often___, seldom___, never___; reads them through___; can discuss what he has read; returns books on time___, undamaged___; asks for books he does not find on shelves___

Oral reports are another good way of observing students' interest in certain topics and their ability to organize and report effectively to their classmates. By observing the audience, the teacher can get an indication of their ability to listen and evaluate the reports given.

The teacher will observe that some students catch on quickly while others need to have a new concept explained several times. While the slow learners should not be ignored, the student who learns quickly should not be held back until the others catch up. While most teachers are aware that retarded readers are often embarrassed when they are laughed at for their mistakes, many fail to realize that the bright child who finds pleasure in reading may suffer equally from an anti-intellectual spirit. Specific observations are:

Attitudes: eager to participate___, interested___, indifferent___, withdrawn___

Creativity: inventive___, shows imagination___, is intellectually curious___, shows maturity of interests___

While observation is only one of several techniques that should be employed, it can be useful and helpful to the classroom teacher. He can learn much about his students through this method that he would not learn while using only a written test. The teacher needs only to make sure that observation is used in conjunction with other data.

CONCLUSIONS AND RECOMMENDATIONS

The Problems Remaining

With the increased recognition of the importance of reading and the changing school clientele—especially in big cities with large numbers of public school children from disadvantaged backgrounds—the problems of teaching reading at all levels seem to be increasing rather than decreasing. Reading problems, like crime, seem to increase as methods of diagnosing and reporting improve. Better diagnostic and teaching techniques reveal more problems to be handled.

Nonetheless, some of the emerging problems show a hopeful pattern and point toward solutions. For example, it is becoming clear that all classroom teachers have become teachers of reading to some degree. The high school history teacher cannot teach history to nonreaders by his old methods. The fifth-grade teacher must know how to spot reading difficulties and either how to overcome them herself or know where she can get some help.

More individualized instruction is called for. Grouping solves nothing unless instructional techniques are adjusted to the needs of the reader. The glaring failure to do this is seen in ungraded classes which are identical in practice with graded classes. Individual reading programs are talked about more than they are put into operation. One of the chief problems is lack of books—a problem that can be solved with money, since books are on the market. Also new techniques and materials must be received with an open mind.

Administrators must give support and attention to the improvement of reading. Only through them can classroom teachers obtain the materials they need and the school system hire the specialists who can construct and execute the services needed.

Finally, there has to be closer cooperation between the classroom teacher and others, such as the reading specialist, who are concerned with overcoming reading problems. It is impossible for either one to work effectively without the other.

The classroom teacher occupies the pivotal position in discovering reading difficulties, taking steps in the classroom to overcome them, referring children who need special help, providing gifted readers with individualized programs to enhance their skills and hold their interest, and, ultimately, preventing read-

ing problems before they become critical and crippling.

Pitfalls To Be Avoided

Below are some of the more common mistakes that classroom teachers make in estimating their personal involvement with reading difficulties in the classroom.

Not my job—Since many classroom teachers do not have specific training to teach reading and are not called reading teachers, they feel that identification and correction of problems in reading do not fall to them. And, of course, in a specialized sense they are correct. Every teacher is not expected to have a specialized knowledge of the causes, diagnoses, and treatment of reading problems; but every teacher must realize that reading is the basic tool that students use and that, no matter what the subject, there are peculiar elements that demand different approaches for reading intelligently. In that sense, every teacher is a teacher of reading. Elementary teachers are more specifically concerned with reading instruction and ordinarily have some minimal background in the teaching of reading skills.

Over-involvement in diagnosis—Because it is easier to test and diagnose without making conclusions, some classroom teachers become entangled in diagnosing problems and never do anything about them. The classroom teacher has to deal with the reality that he does not have the time or the tools to carry out a complete clinical diagnosis of the children in his classes. His diagnosis is a general practitioner's analysis of the gross faults that a child commits in reading, and he tries the most obvious kinds of treatments to overcome these faults.

Haphazard treatment—Classroom teachers often approach the treatment of reading problems in a haphazard way. Instead of asking themselves what skills a child must have in order to overcome the weakness they observe, they simply ask the child to do some practice activity that seems somewhat related to the observed weakness without trying to find out if other skills more basic and fundamental are also deficient. Then, too, some teachers proceed with a number of activities that they call corrective, not relating them to any sequence of reading skills or without evidence of progress. They simply give the child a programed instruction book, for example, and ask him to work in it—without noting progress or determining whether the child needs to go through all of the exercises contained in that program of materials.

Poor selection of materials—A teacher cannot possibly recall all of the good books and practice exercises available for corrective activity. It behooves him, therefore, to select a guide for the materials that he will use in corrective activities. Perhaps a book like Spache's *Good Reading for Poor Readers,* or books published by the Children's Book Council, or the reviews and lists published by the Children's Library Center at the University of Chicago would be beneficial for a classroom teacher to have in ordering and selecting materials for his classroom.

Lack of flexibility—There is probably no greater fault in teachers' attempts to correct reading problems than lack of flexibility. If the teacher is truly going to meet the individual needs of the children he must be flexible in his organizational structure, the materials, the techniques and even the methods that he uses to teach reading. No one method will solve the problems of every child, just as no one technique or set of materials will solve all the problems. It is necessary, therefore, for the teacher to be concerned with individual diagnosis and correction in the classroom and to be willing to make adjustments in finding appropriate materials and techniques for handling the child's problem.

Failure to make a referral—The classroom teacher should realize that he cannot solve or treat the problems of certain youngsters in his classroom. Then he should call in a specialist who has additional diagnostic tools and skills. There evidently are children who do not profit from the usual classroom instruction and must be turned over to a specialist who has the time and facilities to work with the child outside the classroom. Important to keep in mind in making this referral is that the classroom teacher should indicate what steps he has taken in the classroom to overcome the problem. Those steps give the specialist some indication of how to proceed, and not duplicate what has already been tried by the classroom teacher.

Steps for Action

To more effectively cope with reading problems in the classroom, a teacher should:

Stock up—Teachers must stock up on knowledge, causes, and symptoms of reading problems, and find specific activities to overcome them. The teacher must also stock up on materials to use as a handy reference for help. He should also collect a supply of checklists for use during daily classroom occupations. Checklists will give him a systematic

way to observe the child's performance and make a better diagnosis and treatment of the problem.

Reorganize—There seems to be a lot of truth in the statement made by a reading director when he said, "Unless the classroom teacher reorganizes the class, he isn't likely to carry on individualized corrective activities." This monograph contains a number of suggestions for ways classrooms can be arranged for a more personal kind of diagnostic and corrective activity between teacher and student.

Treat the problem—After observation and evaluation have been made, the teacher must decide on what specific problem has to be treated. Unless the problem is isolated and put into specific terms, the chances are that treatment will not be direct enough for the student to benefit from the treatment.

Make a referral—When a teacher finds that his own diagnosis and treatment does not satisfactorily alleviate the problem, he should refer the child to the appropriate specialist.

Conclusion

The classroom teacher is the pivotal person in creating good readers and in correcting difficulties as they arise. In terms of corrective reading, he probably should consider himself as a general practitioner who must be aware of the symptoms of a variety of learning disorders, and must have at his disposal a variety of treatments for these disorders.

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TREATING READING DISABILITIES—THE SPECIALIST'S ROLE

SCOPE OF THE PROBLEM

Some children read significantly below capacity level. These children are lacking in basic reading skills but show no evidence of major physical, psychological, or neurological interferences. Their skill weaknesses can be corrected without clinical services but require more time, expertise, and individual attention than can be given in the classroom reading program. Such students profit from remedial classes where their skill weaknesses can be treated individually. The extent of this kind of difficulty is estimated at 10 to 25 percent of the school population (Strang, 1968, chapter 1).

The classroom teacher has only limited time and training to devote to corrective reading activities. For that reason when he discovers a child who does not respond to his assistance he should refer him to a specialist whose work centers primarily on reading skills. Quite often this referral will take place through the school principal or through the guidance counselor so that any special treatment offered to a student is made known to school officials and parents.

The Staff

The staff needed for a good remedial reading program varies according to the size of the school, the kind of school population, and the excellence of the developmental reading program itself.

The three key staff members needed to provide a good reading program are a reading consultant, remedial reading teachers, and classroom teachers who can teach reading. The term *reading specialist* can be used to refer to the consultant and the remedial reading teacher.

The *reading consultant* could have any one of many titles. In some school systems, there is a reading supervisor or reading coordinator who performs the overall supervision of the total reading program. In other school systems, it could be an assistant superintendent or a curriculum director. Although the responsibilities of the reading staff are discussed later, suffice it to say at this time that some one person must have the final responsibility for the reading program, together with the time and ability to carry out that responsibility. It is the reading consultant, by whatever name, who works directly with remedial and classroom reading teachers.

The *remedial reading teacher* works, first of all, with the children whose reading problems are serious enough to warrant attention beyond that given in the classroom. The remedial teacher must be able to diagnose reading problems and then prescribe and carry out corrective programs for specific disabilities. Beyond that, the remedial teacher must also fully understand the developmental program and be able to make suggestions for its improvement in order to prevent the very problems she is now working to remedy. It is also important for the remedial teacher to work with the classroom teacher so that there is reinforcement of skills and attitudes learned in the remedial program when the child returns to the developmental program in the classroom.

The Goal

Ideally, all remedial reading programs would be self-liquidating by becoming preventive programs as soon as possible. However, the immediate goal is to remedy the reading deficiencies of children who have thus far not learned to read by the developmental reading program.

The next goal is to isolate those factors that have contributed to the children's inability to read and adjust the teaching of reading so that the factors are dealt with before they create further problems. This goal requires continuing research, evaluation, and working closely with the classroom teacher.

Thus, the result of a good remedial reading program would be its eventual diminution and the creation of an effective preventive program that would obviate the necessity of remedial work other than what could be done in the classroom.

If the average class has from 10 to 20 percent of its population in need of assistance with reading problems outside the classroom, then a class of 30 has three to six students who need that kind of help. And, in a school housing 600 children, there will be from 60 to 120 who need the assistance of a special reading teacher or a reading specialist. There would be few schools, therefore, based upon the statistics presented by Strang, that would not profit from having a full-time remedial reading teacher operating within its walls.

The remainder of this chapter is devoted to describing programs and techniques helpful for a remedial reading teacher, a reading consultant, or a reading supervisor whose responsibilities cover the operation of a remedial program within a school building.

DIAGNOSIS OF READING PROBLEMS

Diagnosing reading difficulties is a complicated process. How well it is done will often determine how effective remediation will be.

There is more to diagnosis than simply identifying the reading level of a student. Diagnosis involves (1) measuring the difference between a student's level of performance and his potential ability, (2) separating and measuring the various processes that make up his reading behavior, and (3) insofar as they are relevant, determining causes for his reading disability. The process involves understanding the student on his own terms so that the prescription leading out of diagnosis can build on his strengths to overcome his weaknesses.

Further, diagnosis is not a one-time process. For the student with reading disability, diagnosis must be a continuing process interwoven with treatment.

Diagnosis, of course, should not be reserved only for the student with reading difficulty. It should also be used as a preventive weapon. Early assessment, before reading instruction even begins, can help determine how the child is oriented so that the correct developmental reading program can build on his strengths, whether they be visual, auditory, or a combination. When diagnosis is used in this way, it leads to diagnostic teaching which, in turn, leads to individualized instruction as far as is possible within the classroom.

Early diagnosis is important, and the rule is "the earlier, the better." A 4-year survey of some ten thousand children showed that, when pupils with reading problems were identified by the second grade, they had a 10 times greater chance for successful remediation than did those who were not identified until the ninth grade.

Every research study on the disabled reader points out that multiple causation is the rule rather than the exception (Strang, 1968, chapter 11). It is rare to find a child who has one specific cause and one discrete reading difficulty. However, the more the causes and problems can be pinpointed, the better the chances for overcoming the difficulties. In remedial programs, there is no point in reteaching the child something he has already mastered. It is far better to concentrate only on those steps in the reading process that he cannot handle.

Levels of Diagnosis

The depth and complexity of diagnosis will be determined both by the difficulty of the problems presented by the students and by the knowledge and skill of those doing the diagnosis. There are various levels of diagnosis that take place within the school setting.

The first level is an effort to describe reading performance on an observable response plan—strengths and weaknesses in vocabulary, word recognition skills, sentence and paragraph comprehension—through, for example, classroom observation, teacher tests, and formal group standardized tests. For most children, this level of immediate diagnosis can lead to immediate adaptation of teaching methods to build on strengths and overcome weaknesses. The experience and skill of the classroom teacher are key success factors at this level of diagnosis.

On the second level the classroom teacher also plays a key role as she looks for behavior that may be affecting the student's reading. For example, if the student is passive, he may not be putting forth the effort that reading demands. An extremely limited speaking vocabulary, articulation that makes him difficult to understand, and other speaking clues will indicate that the child may have trouble understanding the words even if, somehow, he can learn to pronounce them. Attitudes, such as a tendency to give up quickly if work becomes difficult, can be other clues. Attitude and personality tests can supplement observation and can lead to motivational prescriptions to overcome poor work habits or attitudes.

On the third diagnostic level, a remedial reading teacher (a reading specialist) looks for a more specific analysis of the process of reading. For instance, the process can be broken down and measured in terms of (1) accurate reception of external stimulus, (2) perception, (3) association, (4) assimilation, (5) analysis, and (6) evaluation—all leading to motor, visual, or vocal output. It is at this level that a higher order of knowledge, skill, and experience is needed in order to detect the strengths and deficiencies and then formulate specific treatments to overcome the weaknesses.

A fourth diagnostic level involves the basic mental equipment of the child—his general intelligence, memory, association, and reasoning. Most remedial reading teachers do not test in these areas, for the testing and diagnosis require special training and clinical experience. Such tests as the Wechsler Intelligence Scale for Children can help measure these underlying abilities. There is no question that intelligence plays a large role in the ability to learn to read. In fact, there are many who think it may be the greatest single factor. However, supposed lack of intelligence is sometimes used as too easy an explanation of inability to read. Many of the standard intelligence tests depend too largely on language; obviously pupils without language background or ability will score low on such tests. Furthermore, the tests can be easily skewed by a few right or wrong guesses. It is also clear, from national surveys of reading ability, that a large proportion of those with reading difficulties—perhaps as many as two-thirds—have normal or superior intelligence. All of these facts should be kept in mind by remedial teachers who are looking for explanations of reading difficulties and who are setting up cut-off intelligence points at which to accept or reject poor readers for special classes.

There are other levels of diagnosis but they are, for the most part, beyond the scope of the classroom or remedial teacher. The deeper levels are concerned with children who may have brain damage, serious emotional problems, perceptual and motor disturbances, and other difficulties that can best be diagnosed and treated in a clinical setting. (See the chapter concerning clinical treatment.)

Types of Tests

The reading specialist can be of great help in determining which tests to use, either to identify children who need remedial help outside the classroom or to gear the classroom developmental program to the needs of the individual children. Most classroom teachers have little formal knowledge of tests or how to evaluate their results. In many school systems, the reading specialist conducts inservice programs for classroom teachers in the area of testing.

It is especially valuable for the reading specialist to instruct himself and the classroom teachers in the construction of and the use of informal tests. A knowledge of informal testing procedures will often enable a teacher to get at a specific problem much more quickly and accurately than if he relied on standardized published tests.

Informal tests can be defined as any locally constructed instrument or technique that tries to measure a specific reading skill or behavior. These tests may be devised by teachers themselves or may be adapted from something that they find in a teacher magazine or in a section of a commercially published test. It may be especially important to use locally developed tests in order to get at the problems of a specific population. For example, some inner-city children may not have adequate vocabulary to handle items that appear in the nationally normed tests presented by major publishers.

Informal Inventories—One concept used in informal testing often goes under the name *informal reading inventory.* An informal reading inventory is a series of graded paragraphs followed by comprehension questions. The purpose of these paragraphs is to find out how well a child performs in selections similar to those he sees in the classroom text. Thus, paragraphs taken from readers at grades two, three, four, five, and six may provide a teacher with an appropriate range to test the performance of third- and fourth-grade students who are not too severely retarded. The child is asked to read paragraphs silently, or the teacher may read paragraphs to the child and have him listen and respond to comprehension questions. After each paragraph, the child answers questions that give an indication of his ability to recall specific details and to give generalizations and main ideas. By careful observation the examiner can note what kinds of problems a child has in pronouncing words, how fluent he is, and what his comprehension is under various conditions. The teacher is also able to determine the level at which a child seems to be able to read without help, the level at which he needs considerable help (which would be the instructional level), and the level at which he simply cannot perform at all. These levels can be contrasted with his ability to listen to a paragraph and comprehend. The listening level represents in a rough way his capacity for handling written material once the visual or symbolic problems are overcome.

A standardized test score from a nationally normed test may indicate that a child can read at a 4.2 level, but it is often difficult to determine exactly what that level means. Most authorities in reading use the standardized test score as a frustration level score, since the child is operating at a high energy, high concentration level when taking a standardized test. Therefore, the 4.2 level score does not mean that the child's instructional level is 4.2. It may, in fact, be considerably lower than that. The instructional

conclusion is obvious: there is no point in trying to teach a child at his frustration level because it will simply add to his present feeling of defeat. The International Reading Association publishes a reading aid booklet on the use of informal inventories in diagnosing reading performance (Johnson & Kress, 1965).

Formal Tests—Formal standardized tests are, of course, necessary tools in mass testing. For obtaining class and school averages, for establishing needs and trends, and for a rough screening device these formal tests will naturally be used. What must be guarded against is the use of standardized tests for diagnostic purposes when the test is not intended as a diagnostic instrument. Most standardized reading achievement tests have a vocabulary and a paragraph comprehension component. Scores obtained on these two components are not meant to give precise diagnostic information but are merely indications that a child or a class fits into a certain percentile or grade norm on the range of scores achieved by the norming population. School systems should consider what the norming population of a standardized test is. Most good test manuals will describe the population in which the test norms were developed. It may be that the school system does not fit into the profile described in the test manual. If that is true, then the norms are not quite adequate for that school population and more appropriate local norms should be developed.

Another consideration in the use of group standardized tests, and their value in diagnosis or screening, is the kind of reading behavior they test. When a test is used as a measure of reading achievement it is taken for granted that the examiner feels that the test exercises do indeed represent the kind of reading behavior he expects of the child. It is clear then that a test that uses paragraph comprehension as the main exercise for determining a score, in effect, defines reading comprehension as the ability to answer factual detail questions on a short reading activity. If the school system feels that other kinds of reading behavior are as important, or more important, than answering questions on a short paragraph, then a different kind of test should be used to determine the achievement of the children and a different kind of test should be used to diagnose problems. Blind faith in standardized test scores leads to neglect of the individual child's specific problems, and it is clearly invalid to base a school's corrective and remedial reading program on the scores from group standardized tests alone.

Individualized Tests—The remedial reading teacher should have the competency and the time to administer individualized reading tests when that is necessary. The remedial reading teacher should be adept at using informal reading inventories and formal standardized tests such as the *Durrell Analysis of Reading Difficulties,* the *Spache Diagnostic Reading Scales,* and the *Gray Oral Reading Test*—all of which serve the diagnostic purpose of discovering performance level and specific disabilities.

There are also tests for critical listening, general visual perception, and auditory discrimination. These involve more than simply discovering that a child cannot hear or see well; and when disabilities in these areas are discovered, appropriate corrective treatment should be prescribed. And if disabilities are found, instruction must be adjusted to compensate for the weaknesses that are discovered. Oscar Buros has published books in which tests related to reading abilities are listed and evaluated (Buros). These books are handy references for those who need to locate tests for specific disabilities at specific levels.

Environmental Indicators—Some diagnostic information can be obtained through knowledge of the home too. A child from a home where language is important and conversation is a significant part of family life will usually have a much easier time learning to read than a child who has had little home experience with elaborated language patterns.

What are the factors in the home that are most often related to reading problems? A low socioeconomic level is one, although parental attitudes and behavior may be more significant than the parents' education, income, or race. The size of the family, the child's position in it, and the opportunity the home presents for learning experiences relevant to school are also important. The usual picture is of a large, impoverished family, usually mother-dominated, living in a noisy, overcrowded atmosphere that is often permeated with an underlying panic. The basic necessities are uncertain, adults unpredictable, the world suspect and threatening. Communication is often through gesture and other nonverbal means, while the language used is terse, not necessarily grammatical, and limited in form. The home has few books, few toys, and little self-instructional material. The children rarely venture beyond their own neighborhood or even their own block. They are rarely read to, and there is little contact between parent and child. Rewards and punishment (often physical) are immediate. Learning to postpone gratification is as irrelevant to their way of thinking as learning for learning's sake.

In such a noisy and chaotic environment, children learn to adapt as best they can. They may learn, for instance, to screen out sounds, sometimes only too well. Their habits of listening and hearing, their speech patterns and pronunciation may prove inappropriate to the traditional learning situation in school. In addition, they may be undernourished or lacking in sleep, inattentive, disturbingly aggressive, or ominously withdrawn. Their absentee rate is probably high.

This generalization, however, suffers the drawback of all generalizations: it is just that and nothing more. It points with accuracy to no individual case. Some children of poverty have learned to read easily despite economic deprivation; some economically middle-class homes are as barren of cultural advantages as the poorest. Middle-class parents, whose anxiety about their child's progress in school takes the form of reproach rather than encouragement, may contribute as much to their child's reading problems as lower-class parents who were dropouts and whose hostility or lack of sympathy toward school is reflected in their child's attitude.

Data about the home and neighborhood environment, then, can offer significant insights into learning involving study habits and motivational drives, which are important factors in the treatment of any reading problem.

Teacher Influence—The diagnoses suggested so far are all based on the presumption that the child has some personal disability. It is entirely possible, of course, that the disability lies with the teacher. Sometimes personality traits of a teacher impede a child's learning. There is no question that teacher competence in reading is a major factor in some children's inability to read. The reading specialist for the school should be aware that a teacher's intelligence, emotional stability, teaching competence, knowledge of reading, and other factors may interfere with a child's learning to read. It may help teachers to observe master teachers as they conduct reading lessons, and certainly a continuing inservice program can provide for certain professional inadequacies and can keep teachers abreast of new developments.

Diagnosis within a school involves the use of formal tests, observation, and trial and error. Several research studies suggest that daily observation by trained teachers who can respond immediately and directly to children's strengths and disabilities in reading are as effective as, and much more practical than, elaborate test batteries. This is not grounds for throwing out all diagnostic tests, but it does indicate the vital need for further training in observation, both for the classroom teacher and the remedial teacher.

The Use of Tests

No test, of course, is any good if the results are not properly evaluated and then put to use. In far too many schools, however, the practice is to "test, score, and file."

Sometimes the problem is that the test is given at the wrong time of the year. If the children are tested in the late spring, there is no possibility of reforming teaching or remediation for that year on the basis of the tests.

Sometimes teachers don't believe in tests. They administer them because they are told to, but they do not rely on the results.

Sometimes no one knows how to interpret the results. Without a skilled reading specialist, and without time set aside for interpretation, tests become liable either to misinterpretation or no interpretation.

When the proper tests are given and properly interpreted by specialists, then the test results can be used in many ways by both the classroom teacher and the remedial reading teacher. The results can be used to—

- diagnose individual and class weaknesses and strengths
- revise the developmental program to overcome weaknesses
- help in the selection of supplemental materials
- help in grouping for reading, both in the classroom and in the remedial program
- evaluate the teaching performance
- screen candidates for remedial and for gifted classes
- set up specific skill goals for the child to achieve

There is a tendency for administrators to compare the test results of their schools with "the national norm." This may be an unfair comparison because the norming population may not resemble the local school population. If a school administrator were to report that the children are, by and large, encountering great difficulty in reading up to their potential, and use such a report as an argument for more funds for reading materials, remediation, and inservice training of reading instructors, then there would be point to the report.

TREATMENT OF READING DISABILITY

There has been much more research in diagnosing reading disability than in treating it. Most of the information available on treatment comes from case histories gathered in the field. There are still far too few controlled research experiments in remedial reading. To offset this gap in knowledge, valuable information is beginning to come from experimental activities as school systems discover methods that are working.

Some treatment of reading disability can be done in the classroom. Classroom techniques are described in another chapter of this monograph directed to the classroom teacher. In general, classroom correction is directed toward the disabilities discovered by the first level of diagnosis—that is, weaknesses in vocabulary, word recognition skills, and sentence and paragraph comprehension. Through a combination of observation and tests, and with the help and guidance of a reading consultant, the classroom teacher discovers the specific skill disabilities a child may have and takes immediate steps to help overcome them, through introduction of new materials, emphasis on self-pacing, or repetition of activity already given to the child.

For more complex diagnosis and treatment, it is more likely that the child can be best helped by removing him from the classroom for a certain period each day to receive specific instruction from a remedial teacher. His disability will determine the nature of the remedial effort. Hence, it is important that the disability be diagnosed accurately.

Establishment of Need

The need for a remedial reading program for a school is not always easy to determine. For one thing, the school administrator may be reluctant to suggest the possibility because of a lack of funds. For another, the classroom teacher may somehow think that the necessity for remedial instruction is a reflection on her abilities and, therefore, does not bring reading disabilities to the attention of the administrator. A third roadblock toward establishing the need is the shortage of trained personnel who can initiate a remedial program.

The most widely accepted method of determining the need for remedial reading programs is to conduct a survey of the reading abilities of the children. This kind of survey can be done through group testing, using such instruments as the *Stanford Achievement Tests* or the *California Reading Tests,* and can be carried out in the classroom under the direction of the classroom teacher. The reading survey will not be a diagnostic study, but it can identify those children who, due to some difficulty, show discrepancies between their reading achievement and their capacity. Results of such a survey can be used by a reading specialist to recommend specific children for further diagnosis and to point out the need for a remedial program in the school.

It is important for the classroom teacher to be fully informed of the results of the reading survey. The reading specialist and the classroom teacher can cooperate in proposing a remedial program based on the survey results and on observations made by the classroom teacher.

Selection of Children

The informal reading survey is only the first step. It identifies by a gross measure students who appear to be reading below their grade level. The next step is to test capacity or mental ability. Scores from group intelligence tests are only approximations of the child's true ability, but it is another index to indicate whether the child needs remedial help.

On the basis of the reading test and the mental ability test, the reading specialist can indicate those who appear to need and would profit by remedial help, and what priority they appear to deserve for such help. Bond and Tinker, in *Reading Difficulties: Their Diagnosis and Correction,* chapter 4, outline a formula for finding reading expectancy levels using IQ scores and school grades (Bond and Tinker, 1967, p. 93). The specialist can use this formula and then compare it with a reading level as reported by the reading test. Such a comparison will help determine priority ranks for those children who need reading help. By simply giving a 1 priority to those who seem to need most help, 2 for those next in order, and 3 for the least disabled, the school will have some measure of how many children might benefit from a remedial program. Space, funds, and time limitations will probably prohibit offering help to all who need it. Therefore, the priority listing becomes important. For those who need help but have lower priorities, the reading specialist can work with the classroom teacher in devising methods and locating materials that can be used in the classroom.

Remedial Classes

On the basis of the initial diagnosis, the remedial

teacher should determine how the children should be grouped, how often they should meet, and for how long.

Since the children are unlikely to be homogeneous as far as reading abilities are concerned, the smaller the group the better. Ideally, each child should receive individual instruction, but the realities of time and personnel are such that that is rarely possible. Most authorities recommend groups of two to six, with 10 being the maximum usually considered (Harris, 1961, p. 303). A small group of six to 10 enables the remedial reading instructor to give individual attention to all the pupils. It is generally accepted that the remedial reading instructor should have a maximum caseload of 50 children. With more than that, there is no time for proper maintenance of records or for communication with the classroom teacher who has the task of reinforcing the skills learned once the child is back in the regular classroom.

Opinions differ as to how often the remedial classes should meet. Some hold that half-hour classes once a day are better than hour-long classes every other day. Others believe that little can be accomplished in a half-hour. The nature of the disabilities and the teaching style of the remedial instructor will influence the decision.

There is also difference of opinion as to whether to group children by sex or by age. In most cases, there will be many more boys than girls in need of remedial help, perhaps twice as many. Whether to have all of the girls at a certain reading level together, keeping the other classes exclusively male, or whether to mix the classes is a matter of preference.

Psychological factors may lead toward grouping according to age, always considering reading level as well. If an older boy, for instance, who may be reading at the preprimer level, is in with a class of first-graders he may become so depressed about his ability that it will be impossible for him to be helped.

Some remedial teachers prefer to mix abilities. For example, while most of the remedial class will be able to read comfortably at a certain level, it may be helpful to have one or two who are below that level and one or two who are above it. The majority then have leaders who can set goals, and the slower students can learn from those above them in ability. Again, the research is not definitive in this area and the pragmatic approach of doing what seems to work is the usual one followed.

Space for the program is a factor to reckon with in most schools. It is not unknown to have remedial reading classes meet in hallways or boiler rooms. Obviously, the discomfort, lack of good lighting, and unattractiveness of such learning conditions will handicap a program. Many new programs are conducted in trailers in the school yard. Some are held in assembly rooms that are partitioned off to create small classrooms. In general, it is good to have as few visual and auditory distractions as possible. Remedial teachers sometimes prefer rooms without windows and with carpeting for this reason. A small room or trailer, with just enough space for the pupils' chairs and a few pieces of equipment, can be made cheerful and intimate. What is needed is an environment to stimulate learning; and this will differ according to the ages of the pupils, their disabilities, and the nature of the teacher, the equipment, and materials to be used.

The remedial program should result not only in the improvement of skills, but also in better attitudes toward reading and toward oneself. If attitudes change, then progress is more likely to continue long after the special instruction has stopped. Many children who cannot read are convinced that they cannot learn. Their first requirement is for success in reading. This they can get from a skilled specialist who can select materials and try techniques with which the child can have immediate success. He then begins to think of himself as a reader and this modified attitude will carry him through more difficult steps.

Reading specialists across the United States generally approach the tasks of diagnosis and treatment by looking at narrow groups of skills; for example, the identification of short vowel sounds and their letter symbols. This approach enables the reading teacher to establish clear performance goals and to look for particular techniques and materials to accomplish these goals. As part of the research on how to overcome specific reading handicaps, a representative group of techniques and materials were collected and classified. Samples of these items are given in a following section, and remedial reading teachers and classroom teachers may find in these samples some guidance in treating skill deficiencies. Reading skills are classified as follows:

Perceptual Skills

- auditory skills
- visual skills
- motor skills

Word Identification Skills

- sight vocabulary
- phonics skills
- structural analysis skills
- context skills
- syllabication skills

Comprehension Skills

- words
- sentences
- main ideas
- generalizations

Rate of Reading

Oral Reading Skills

Also contained in the previous chapter are suggestions for individualizing instruction. Even though most remedial reading teachers meet relatively small groups, teachers need continuing encouragement and guidance in individualizing within the small group; otherwise the children may receive only whole group instruction while seated with three or four other children. Checklists, recordkeeping forms, and small group management techniques are included in that section.

Special Equipment and Materials

The equipment and materials prescribed for any child should grow naturally out of the diagnosis of his reading disability. For example, diagnosis may indicate that the child learns best from auditory stimuli. It is obviously a waste of time and effort to present him with materials that are primarily visual, at least until he can develop some visual skills.

There are materials now on the market that cater to the various learning styles of children: kinesthetic materials such as letters made of sandpaper that the children trace with their fingers, word and letter and phonics charts that make use of color for the visually oriented, tapes that train for auditory discrimination, tachistoscopes that retrain eye muscles and movement, and a variety of games that are designed to increase a child's ability to coordinate eye and hand movements or his sense of spatial relationship.

It is generally agreed that the materials in a remedial program should be different from those with which the child has already failed in the classroom. Therefore, the remedial class might use a basal reading series, but it should be different from the one used in the child's class.

Variety is another characteristic of reading materials in the remedial class. With a variety of materials, the child is more likely to find something that reaches his skills and his interests. Furthermore, supplementary reading texts, trade, or library books that have high interest but require low reading skills can supplement or replace basal readers.

Often teachers find that the exact materials they would like to have do not exist, and so they make their own. Children, too, can participate in the making of materials for themselves, such as word boxes in which they keep words they have learned and which they use as the basis for writing stories.

The cost of materials and equipment for remedial reading is usually shocking to a school administrator who may have been budgeting as little as $3 per child per year for textbooks. It is possible to spend thousands of dollars on materials and equipment quite quickly. However, especially in the case of such expensive equipment as a tachistoscope or a tape recorder, the expenses are nonrecurring and, when spread out over thousands of children and many years, are relatively small in the long run. The usual remedial reading class would probably need at least $2,000 to $3,000 to equip itself originally on a modest scale. The cost, of course, will depend on the numbers treated, the seriousness of the disabilities, the goal of the program, and, to an extent, on the preferences of the reading teacher. On the latter point, it is a waste of everyone's money to buy equipment for a teacher who prefers to prepare his own materials or use commercial books and games. The choice of equipment and materials should be made by the reading specialists and not by the administrators, who ordinarily are not reading experts and who are not going to have to use the equipment to teach.

Guidelines for Effective Programs

Those who have visited remedial reading programs have noted some positive influences that make them effective. These may be helpful to a staff wanting to initiate remedial instruction.

- First of all, the effective programs have well-defined philosophies which were established cooperatively by administrators, supervisors, classroom teachers, remedial instructors, and special personnel.

- The good programs recognize that an adequate diagnostic program is essential to a good remedial program, using individual and group testing procedures to evaluate pupil achievements and needs.
- The remedial program is effective to the degree that it is related to the capacity of the student being helped, the nature of his difficulties, and his interests.
- Effective programs involve children in reading activities that stimulate their self-confidence and self-direction, thereby improving their self-image.
- The most effective programs give attention to the students who are not reading up to their potential, even though they may be reading at grade level, as well as to the students reading below grade level.
- Procedures for selection of pupils for special help are carefully outlined and not confined only to reading level.
- Qualified reading personnel are available to help students with varying degrees of reading handicaps.
- Classroom teachers are taught to recognize deficiencies in reading and to modify their instruction on the basis of classroom diagnosis.
- A small teacher-pupil ratio, with no more than six to 10 pupils, is most effective in remedial classes.
- Each remedial instructor has a centrally located room that is comfortable, attractively furnished, and has adequate teaching, work, and storage space.
- A suitable library area housing books appropriate for many individual differences is readily available.
- Reading teachers have no duties other than those related to their major work. They have daily planning and conference periods, as well as time to serve as resource personnel and to introduce new procedures and materials to colleagues. They have opportunities to examine, evaluate, and recommend materials.
- Parental involvement is encouraged through PTA, neighborhood meetings, and frequent conferences with parents of children in the remedial program.
- From a long-range point of view, the prevention of reading problems is more important than their correction. Identification of potential reading failures takes place as early as possible. Provision for special help for children experiencing minor difficulties is undertaken early, before the problems can become more severe.
- Successful programs are characterized by good communication with school administrators and close working relationships between remedial and classroom reading teachers.

METHODS OF HANDLING READING DISABILITY WITHIN A SCHOOL

Every school has some method for handling remedial reading. At the least helpful end of the scale is the old-fashioned, ineffective method of simply keeping the slow learners after school to get more of the same from the classroom teacher. Not only do the teaching methods and materials that didn't work the first time usually not work when applied in extra doses, but the child's opinion of himself sinks even lower as he faces what he can only regard as punishment for his stupidity.

The premise of such after-school work may, in all fairness, be a good one—that the child requires individual attention and extra concentration on specific skills. Some schools, recognizing those needs, provide tutors—either paid aides or older students—to give extra attention and help to the nonreaders and slow readers. Tutorial programs, particularly if the tutors are informed and guided by reading specialists, can be extremely beneficial.

The most effective programs at the other end of the scale are conducted by reading specialists working cooperatively with the administrators and classroom teachers in an informed, structured program that falls within the school day. Usually, the children attend the remedial program at times set aside for classroom work in the language arts. The schedule is conscientiously arranged so that the children do not miss classes they enjoy, such as music, art, and physical education, and which, through training in auditory, visual, perceptual, and coordination skills, actually help remove some of their reading disabilities.

Most current school remedial programs fall between these two extremes. For one thing, the acute

shortage of reading specialists prevents, in many schools that have the desire and the financial ability, the hiring of directors for their reading program. Instead, they rely on teachers who have been effective classroom instructors to head the remedial effort. Many of those teachers, realizing their own lack of information, take courses in reading and, through professional reading and workshops, try to make up for their own shortcomings and lack of knowledge. Those who have seen them in practice are impressed with their enthusiasm and with the efforts they are making to prepare themselves professionally for the assignments thrust upon them.

Coordination between the remedial teacher and the classroom teacher is acknowledged to be the keystone, particularly if the problems are ever to be prevented. Coordination is an acknowledged necessity but, in practice, it doesn't always occur. When it does not, the reason usually is that it is not conscientiously planned for from the start. Full coordination requires free time for both the remedial teacher and the classroom teacher, and that is in short supply in every school. Unless such free time is built into the schedule, with replacement teachers or aides hired to serve as replacements while the teachers confer, the time vaporizes and the coordination never takes place. Coordination also requires full sharing of knowledge, so that the remedial teacher knows what is going on in the developmental program in the classroom and the classroom teacher knows the goals and methods of the remedial program. Inservice programs can help with this sharing of knowledge.

The reading specialist must also work closely with the school principal to effect a good remedial reading program. The principal must see that there are channels in which the teacher and the reading specialist can communicate. He must see that the reading specialist has access to records and to class observations. Inservice training is likewise the principal's responsibility. He must either do these things or delegate the responsibility to the reading specialist. Without a clear-cut sense of responsibility and authority, these changes in coordination and follow through will not occur.

The second ingredient of the effective program is follow through. Children attend the remedial program, make great strides, and then little is done to reinforce their new, good habits or to provide them with additional help as they encounter new problems in regular classes. The remedial reading teacher should provide the classroom teacher with a plan that will carry the student through additional growth activities. Some schools bring students back for a progress report after 6 months. This checkpoint enables the remedial teacher and the classroom teacher to evaluate the student's plan and his progress. It also reminds the classroom teacher of the need to continue corrective activities in the classroom. Part of followthrough, too, would be a check on how such remedial children fare 5 or 10 years later. School systems appear to regard such follow through only as a desirable luxury for which they lack the time, personnel, and money. Ultimately, of course, such evaluation would provide some evidence about the long-term value of remedial procedures.

Despite the shortcomings of current practices, the most notable characteristic of remedial reading programs in the schools today is increased activity. Something, at last, is being done. And in many places what is being done is carefully planned, skillfully executed, and remarkably effective. Furthermore, some of what is happening can be emulated by other schools, even without large expenditures of money.

It is difficult to find patterns in a dynamic field that has no classic models, but some patterns are emerging. Ordinarily, schools try more than one thing at a time; so if a school is mentioned here as being involved in one aspect of remedial work, that does not necessarily represent its total effort.

Reading Coordinator

The reading coordinator functions as a service person for the classroom reading teachers in her building. She helps with the diagnosis of difficult reading problems within a classroom, shows the teacher how to group children according to given needs, teaches demonstration lessons so that the teacher will know how to cope with the same kind of problem in the future, does some remedial teaching in those cases where no learning is occurring within the classroom, acts as a curriculum adviser and supervisor for the principal, tests and places new students entering the school, and interprets the reading program to the parents. In addition, the reading coordinator provides supportive help to probationary teachers upon request.

Some of Detroit's coordinators have started Reading Adventure Rooms in their schools. In these rooms, paperback books are available for the children as well as for the parents. The rooms are open before, during, and after school, and there are few restrictions on taking books home.

Inservice training includes a 3-week workshop for

coordinators, a 1-week workshop for principals, and a 1-day workshop for the entire school staff. The very existence of these elements in the inservice program affirms the need for all these people to do their parts in the development of good readers.

There are both tangible and intangible benefits from the program. Some principals report reading improvement of all children, with one principal stating that, for the first time in 12 years, the children in his school scored near the national average on standard achievement tests. More difficult to define is a kind of stability that the coordinators have brought to reading instruction within a school. The unanimous enthusiasm of classroom teachers and principals for the program is another measure of its success.

Programed Tutoring

Tutoring with a difference is having dramatic results in 40 schools in Indianapolis and in a school in Bloomington, Indiana. Called programed tutoring, the system was developed by Dr. D. G. Ellson and two of his associates in the psychology department of Indiana University (Ellson et al.). Through the program, the least able reader in the class is able to become as proficient as the average student.

Programed tutoring uses relatively untrained tutors, including housewives and students. The tutors are given completely detailed lesson plans from which to work. They see no more than 15 students a day and give 15 minutes of individual attention to each child. The programed instruction stresses sight reading, comprehension, and a simplified form of phonics. The tutors make no decisions on their own, but follow the detailed instructions to the letter. To guard against inflexibility, the programers have made alternate responses available for use according to students' reactions.

Those children who are in the lowest 25 percent of their reading classes are enrolled in program tutoring. These children report to the tutors for 15 minutes each day. Meetings may take place at tables placed in corners of classrooms or in small rooms available in the school building.

Use of Physical Education

A unique plan for perceptual training is being tried in Niskayuna, New York. It was devised by the physical education coach in an elementary school, working with the school psychologist, the principal, the kindergarten and first-grade teachers, and teachers of speech, music, and art.

The idea is based on giving the child just beginning to learn to read some experiences in motor learning, tactile sense, perceptual training, and eye-hand coordination. The teachers all feed into the program ideas on what the child will need, such as left-right awareness and concepts of space; and the physical education program is formulated for these specific skills. From the child's point of view, he is simply having fun and is unaware that he is being "taught."

According to the physical education teacher, his classes heretofore "have had little thought process. We are used to telling the children what to do without thinking about why. Now we are giving them problem-solving games that have some content."

Small Group Remedial Work

Many schools have small groups of students taught by remedial teachers in a small room on a daily basis. Anderson, Indiana, provides a good example of one such program.

The Anderson program is administered from a central office by the director of curriculum, but each remedial reading teacher works in only one elementary school and is responsible for treatment of moderately severe reading disability within that school building.

The children are selected in an informal manner. Classroom teachers select those who are falling too far behind in reading to do adequate work in the classroom. The remedial teacher then tests the children through an informal inventory, giving more formal tests only when they seem necessary.

Eight children at the most come to the remedial teacher for 20 or 30 minutes a day, 4 or 5 days a week. (The schools differ on the length of period and on the frequency of the meetings.) The children come on a grade-level basis, which presents some difficulties since there is usually a wide range of ability. This necessitates working individually with each child for part of the period.

In one of the schools, the remedial reading teacher teaches 4 days a week and uses the fifth day to construct tapes for the children who do not attend the remedial classes but need some exercises that the classroom teacher does not have time to give.

The factor that makes the Anderson program effective is the personal contact between the remedial reading teacher and the classroom teacher. Working together, they handle the selection, evaluation, and reorientation of the child.

A team of university consultants helped design the

program and did some of the initial training for it. School administrators now wish they had asked the consultants to devise a more complete evaluation phase. However, a pretest and posttest comparison of scores shows that there has been sufficient growth on the part of the children in the program to warrant its continuance.

Student Tutors

An elementary school in San Bernardino, California, is trying an experiment with 40 children who are nonreaders.

In a large room with 15 small tables, teams of two children sit opposite each other. One is a nonreader, the other a junior high school student-tutor. The student-tutor uses a wide variety of techniques—including flash cards, visual-audio-kinesthetic-tactile (VAKT) materials, and kits for teaching children a second language—to drill their pupils in specific skills. Nonreaders may come to the room as often as three times a day, with classes held continually for five 55-minute periods every day. The classroom teachers or the counselors refer the children who need help to the special classroom. When they arrive, the teacher in charge assures them, whatever their problems, that they "will learn to read."

The student-tutors are selected on the basis of their academic ability. They also must have exceptional citizenship records and near-perfect attendance. The enthusiasm and determination of the student-tutors are evident in the seriousness with which they approach their responsibilities.

A special library has been built for the program so that many books, games, newspapers, magazines, and other materials are readily available.

The children are given tests four times a year to chart their progress and attitudes and have shown improvement in scores on the Gray Oral Reading Test and on their report cards.

The student-tutors meet together every Friday for an inservice session. Their tutoring work is an elective for which they get credit. Some of them have been hired by parents to do further tutoring after school hours. Besides an intensive pretraining course, the teacher in charge works with the student-tutors before and after school and during lunch periods. The best of the student-tutors, in turn, help train new tutors.

Reteaching of Reading

San Diego, California, has a project called "The Reteaching of Reading Program," whose purpose is to offer a varied and flexible approach to reading for pupils of average or above average ability in the primary grades, with special emphasis on grades two and three. It is a remedial program, but it also aims to prevent serious retardation later on. Many of San Diego's schools have a high percentage of Mexican children, which contributes to the reading problems because English conversation at home is the exception.

The remedial reading classes are composed of eight to 10 primary children with deficiencies in work recognition and comprehension skills. The program offers them more experience in sequential and systematic reading instruction at their individual reading levels. Most of the children have an IQ of at least 80, and they are usually 1 to 2 years below their grade level in reading. They are selected principally on the recommendation of the classroom teacher.

The remedial classes are conducted in a variety of places. In one school, they are housed in an annex across the street from the elementary school; in another school, in remodeled closets. Not much space is needed—room for six or eight small chairs for the pupils, a corner for books and a phonograph, a chalkboard, and a teacher's desk, since the rooms are used by the remedial teachers as offices for individual conferences with the children and with their parents.

One principal said that the program was one that any competent classroom teacher could handle "if she had the time and a little training." Actually, the remedial instructors, for the most part, have had long experience as effective teachers of reading and have also taken advanced college work in reading. The three institutions of higher education in San Diego, especially San Diego State College, offer a wide array of inservice credit courses, including some in the teaching of reading.

The children go to the remedial classes for 40 minutes every day and usually remain in the program for 10 weeks, although it is not unusual for a child to remain in the program for the entire school year. He leaves when both the remedial teacher and the classroom teacher agree he can now handle the same work that the rest of the children in the classroom are doing.

The program is strongly phonics-oriented. Also, efforts are made to get the children to use language orally. Toward that end, phonograph records are used for auditory training, and experience stories make up a good part of the curriculum. A typical exercise is to pick out word cards and then make up sentences

using the words. The remedial rooms have many more materials than the usual classroom. Not only are there basal readers (different ones from those the child uses in his classroom) but also transparencies and high-interest trade books.

One of the many good features of the program is an excellent teacher's guide for the remedial instructor which was prepared by the staff. It gives theory as well as practical suggestions for teaching specific skills.

A Saturation Program

The Los Angeles City Schools have many and varied remedial and preventive programs.

For the elementary schools, there are six reading coordinators. They work directly with 200 reading teachers who, in turn, work with the classroom teachers. Four reading teachers are assigned to a school. Besides working with the classroom teachers, informing them of new methods, materials, and techniques, they work with six to eight children at a time who have reading disabilities, 45 minutes to an hour a day. One result of the remedial classes is to take the children who are performing least well out of the regular classroom during the reading period, leaving only 22 children of about the same reading ability for the classroom teacher.

The reading teachers emphasize self-image, attitude toward reading, and reading skills, especially with the first-, second-, and third-graders.

The classroom teachers make the referrals to the remedial teachers who give the children a work recognition test and some motor, audio, and visual perception tests. The ones selected are those thought to be able to profit most from the special classes.

Each remedial teacher uses the approach she finds most congenial and effective. Usually there is emphasis on phonics and oral language with experience stories frequently used.

In some of the schools, the entire school population is given an informal reading inventory. Summary sheets on the findings are then supplied to the classroom teacher, and he is given help on how to capitalize on the children's strengths and compensate for their weaknesses. Sometimes the remedial teacher works in the classrooms with the teachers, especially with the new ones, to demonstrate materials or techniques.

Communication with the classroom teacher and with the parent is stressed. Inservice classes and workshops are held in some cases as frequently as once a month. Parents are encouraged to come in and discuss their children's problems. Mexican mothers, in particular, who do not work outside the home, are often used as volunteer tutors for the children. Some parents come to the school to get books for themselves or their children.

Scheduling is a problem, as it is for any remedial reading program. Especially in schools that are trying many new enrichment programs, the trick is to get the children at a time when they will not be missing some other activity that would be just as helpful to their development.

Junior High Special Class

In one Mexican neighborhood of Los Angeles, a special program is offered for junior high school students who are reading as poorly as the first-grade level. In a carpeted, air-conditioned bungalow that looks like a quonset hut from the outside, everything has been done to provide a quiet, attractive, pleasant atmosphere for learning. The bungalows are called Student Achievement Centers.

A multimedia approach is used, with emphasis on oral language. Classes are small and last an hour a day, 5 days a week. Five "graduates" of the class work as student aides, helping the teachers and the other students. One of them, a Mexican boy, worked himself up from first-grade to fourth-grade reading level during one year in the program.

Films, games, tapes, and a wide variety of books, magazines, and teacher-written materials are used. Generally speaking, the teachers find they cannot rely on commercially prepared materials because those of high interest are too difficult for the poorest readers. The staff writes materials that are tested in the bungalows, revised, and then mimeographed or printed for teacher use.

"Every book has one page we can use," said one of the teachers. Like many of the other teachers, he finds mechanical equipment too fast for many of the students. "They have to learn to walk first," he said. The children are taught phonics and other work analysis skills through the use of workbooks that give them a great deal of repetition.

The big problem is motivation. Once the children have a little success, they tend to move rapidly ahead.

Parent Involvement

Home contact is felt to be very important in the Los Angeles effort to improve reading. The remedial reading teachers make home visits for every child in

their remedial classes. Teas and other social events are planned to bring the parents into the schools.

As evidence of the parental interest, one school offered a 16-week course for parents called "Helping Your Child Learn to Read." Despite the fact that the evening sessions ran as long as 2½ hours, there were few dropouts.

Use of Equipment

Using mechanical equipment to help teach reading is often a matter of teacher preference. If the teacher is set against using it or if there has been little or no instruction in how to use it, chances are that any equipment purchased is gathering dust.

But as teachers overcome any initial fears they may have about machines and as they are taught to use them properly, the teachers discover their potential for helping children learn to read. As a rule, children love machinery—the more complicated and the louder it is, the better. Those who have seen such equipment used knowledgeably and skillfully do not doubt its value—at least its motivational value.

Visits were made to two California schools where machines are used well. In the Oakland schools, remedial classes for one elementary school are held in a trailer in the schoolyard. The trailer is filled with equipment, including a tachistoscope, a controlled reader, a standard typewriter, tape recorders, a record player, and teaching machines for programed learning. A child has a fairly free choice of what to use. He might choose to put on a record and dance out a story. He might decide to write his story on the typewriter, or record the story and listen to the playback. The children come four days a week to work on their reading. One reading teacher makes it a point to go to the school for coffee every morning, giving her a chance to meet with classroom teachers. Despite the freedom given the children in the trailer, the teacher tries to steer them to the equipment or books that will help them most in the skills they lack.

A school in Richmond, California, uses a portable building for its remedial class. Second- and third-graders there are given two diagnostic tests, one to place their reading levels, the other to locate skill weaknesses. Three teachers work in the portable building, each taking a group of six to eight children at a time. The idea is to do saturation remedial work for these children rather than spread help out over the whole school. Particular emphasis is placed in visual and auditory perception training. Visual-audio-kinesthetic-tactile techniques are used. The most noteworthy piece of equipment is a large console composed of tape recorders and several tape decks. Individual hookups to tapes are available, giving the console its name—*listening center.* Children sit at the console and the teacher tunes them in to a tape, selected from approximately 250 available tapes, which will help them with their individual skill work. The room has games, charts, overhead projectors, and books. In all, there is about $10,000 worth of equipment and materials in the classroom. Even with all of that, however, the three teachers have discovered that some of the most useful materials are things they make themselves for specific children with specific needs. "It's the little things you do that count," said one. Improvement in the children will range from 6 months to 2 years in reading ability.

Compensatory Programs

San Francisco offers a good example of combining remedial reading with compensatory education for disadvantaged children. The children who are having the most difficulty with reading in the elementary schools are sent to a compensatory teacher for an hour a day. Each compensatory teacher has about five groups a day, teaching about 60 children in all.

In general, the compensatory teachers follow their own specialties and the interests of the children in establishing the content of the classes. One may concentrate on photography, another on botany, while another may deal with Negro heroes or ancient civilizations as the "handle" to motivate the children. One class has been focusing its attention on a baby chick that has been a member of the class since it was an egg. Field trips to whet appetites for learning and to provide content for stories, plays, and conversations are an essential part of the remedial efforts.

The compensatory teachers are under the direction of a resource teacher, who visits the classes and offers on-the-spot help with reading disabilities. Inservice training for the compensatory teachers is part of the program. If, for example, a compensatory teacher is having trouble with her classes the resource teacher takes her around to see some excellent compensatory teachers at work, pointing out what techniques they are using.

In one classroom visited, the concentration was on botany. Each of the children had several plants growing in tin cans. The teacher and the children together have built a greenhouse and they have beans growing up yardsticks, starting from tin cans containing different kinds of soil to see which bean grows best in which soil. As the children are measuring the

beans (learning math skills on the side) and talking about the other plants (and their trips out to the woods to dig up more plants), they put words on the chalkboard, such as *absorb, moisture, mineral, dissolve,* and *ingredients.* Their interest is keen, and once they have been persuaded to talk about a subject, they write about it, act it out, and record it on the tape recorder.

The patterns for handling remedial reading are infinite, depending primarily on the resources of the school and the ingenuity of the reading specialists. Some schools try to give a little help to all the children who need it in all the grades. Others concentrate on the first few grades, trying to correct disabilities before they become so serious that they prevent the children from keeping up with their other work. Still others put their stress on the advanced grades, trusting to the developmental reading program and the classroom teacher to help the younger pupils.

Sometimes the emphasis in a program is put on changing and improving attitudes. Such a goal is difficult to build into a program, and more difficult to evaluate objectively. An Illinois school district, Deland Weldom Community Unit Schools, has centered its program around improvement of attitudes as an incentive to reading. Children are referred to one of two reading teachers who interview them informally and allow them to browse through the reading classroom library. Children are encouraged to return often to look at and to find books they want to read. When the children become used to books they begin to want to read better and go to the reading teacher for help. Individual programs of instruction are worked out at the time the child comes and asks for help.

Invariably, the children appear to enjoy the special reading classes. In some cases, they enjoy the special attention or the change from the regular classroom. But they also appear to take great pleasure in the learning itself and in finding out that they can, after all, learn to read.

PROCEDURES FOR ESTABLISHING A PROGRAM

Instituting a coordinated reading program in the schools, including a remedial program, requires change and an increased expenditure of time, money, and effort. Although the pressure for change can and does come from many directions—from teachers, parents, administrators, and the public—change within any school or school system finally becomes the responsibility of the school administrator. He can, of course, delegate some of the work and responsibility to a staff member—in this case, the reading specialist.

Steps for Establishing A Remedial Reading Program

1. Determine extent of need
   - Through survey of children
   - Through staff discussions
2. Establish objectives
   - Through staff recommendation
   - Through community involvement
3. Find personnel
   - Through recruitment
   - Through inservice training
4. Find facilities
   - Through remodeling
   - Through new construction
5. Purchase materials
   - For specific skill development
   - For high interest reading
   - For variety and flexibility
6. Select children
   - Through discrepancy criterion
   - Teacher recommendation
7. Schedule treatment
   - To child's best advantage
   - On a frequent basis
8. Evaluate regularly
   - Child's progress
   - Procedures of selection and treatment
9. Report results
   - To child and parents
   - To classroom teacher and principal

Each of these steps is discussed below.

Determine Extent of Need—The need is often

brought to the attention of the administrator by parents who realize that their own children are not learning to read. Classroom teachers, especially those who do not feel threatened by what they feel others may view as their own failures in teaching, often beseech administrators to do something about the children who simply cannot learn to read through the classroom developmental program.

The need is not always evident, however. Unconcerned parents or those unaccustomed to asking the school for anything do not come to the school about their children. Classroom teachers on occasion take the point of view that there will always be some children who do not catch on and chances are they will learn to read as they progress through the grades, all evidence to the contrary notwithstanding. It is then up to the administrator to assume that there might be reading problems in his school and take steps, such as an all-pupil survey, to find out if it is so.

Several principals have found that, in addition to a survey of the pupil's reading performance in the school, a meeting of the staff in which the reading needs of specific children are discussed is useful. These meetings produce lists of names that teachers compile in small committee sessions. All those teachers who have the same groups of children try to get together in order to discuss students with specific difficulties. This enables them not only to come up with a list but also to identify certain difficulties of individual children.

Establish Objectives—Once the extent of the need is known it is up to the staff and the community to determine specific objectives for a remedial program. Generally speaking, a school system has a greater need than they have resources to handle the need. In that case it is necessary for the staff to determine whether their goal is remediation of all pupils with a need or help for a given segment of the student body. Perhaps they will determine that they want greater emphasis on a program of prevention. Thus, the early grades will receive most of the attention, with only very troublesome cases being taken from other grades. Many school systems have made the decision to emphasize prevention, with the thought that it is better to eliminate problems in the primary grades when they are minor problems than to have these develop into major difficulties in the secondary school.

The school staff will want to decide on what efforts each member of the staff should make in regard to the remedial reading program. The remedial reading teacher forms only one element in an effort to overcome reading problems. Part of the objective of the program should include inservice training for classroom correction; means for reporting findings about individual children to classroom teachers, administrators, and parents; and clear-cut procedures for referring children to the remedial teacher or the reading specialist for diagnosis and treatment.

Most schools have found it wise to include parents and members of the community in a remedial reading program. Even if the parents are brought in at the planning stage only to inform them that the school is considering a remedial reading program, the benefits can be considerable. Once the parents understand the nature of the program and its objectives, they tend to cooperate and spread among themselves the good word about the school's concern for individual children. It is quite possible, too, that parents will volunteer to assist in the establishment of the program and its operation. Parent-tutors or parent-secretaries for the program can often be gained on a volunteer basis, and they may even help run the school library or other aspects of the program.

Find Personnel—Assuming that a school survey reveals the need for remedial help for some of the pupils, the next step is to formulate the best possible program to meet the specific needs of the children. It is usually a mistake for the administrator to formulate the program and then mobilize the staff to carry it out. For one thing, most school administrators do not possess enough competence in reading. They know little about diagnostic testing, remedial techniques, or even developmental programs. Even those administrators who are closely involved with curriculum development admit they do not have the knowledge or, even more important, the time. Therefore, the administrator must turn to reading specialists.

An effective remedial reading program in a school system with 10,000 or more children involves the following kinds of personnel: a reading coordinator who may also be the language arts supervisor, a special reading teacher for each school, and a teacher aide. Sometimes the teacher aide is a secretary and sometimes she is a person who actually engages in contact work with the students in the class.

Finding appropriate personnel to handle a remedial reading program in a school has been a difficult task. Reading specialists are in such great demand that the supply of trained people is quickly depleted. But the reading coordinator or the school principal trying to set up a program in a school

should use normal recruitment as a first step in finding personnel for his program. If a trained person is not available, then an alternative is to take a good teacher from the classroom and provide him with inservice training and/or university training that will help him become a remedial reading teacher or a reading resource teacher for the school.

Part of the job of finding personnel also involves the identification of the roles that each of the new personnel will play in the school program. Again, cooperation among those directly involved with the correction of reading difficulties is essential, and cooperation and communication must also exist among the school administration, the classroom teachers, and those involved with the remedial reading program.

Working directly under the guidance of the reading coordinator are the remedial reading teachers and the classroom teachers. Together they learn about each other's areas of expertise and devise an overall program whose ultimate goal is the prevention of reading disabilities. Inherent in the program must be coordination and shared responsibility. If the program is devised from the top and then imposed on the staff, there is understandable resentment. Furthermore, such a method is self-defeating because it does not take advantage of the intimate, practical knowledge of the classroom teacher and specialists working directly with the children.

Particularly at the beginning stages of a reading program, sufficient time must be allowed for planning. A classroom reading teacher cannot be assigned the task of devising a remedial effort without relieving her of her classroom responsibilities. The reading coordinator cannot do an effective job if he also has so many other administrative functions that the reading program must formulate in blocks of time stolen from other duties.

In the initial formulation of the reading program, time should be allowed for continuing evaluation. This will, in a way, determine the number of specialists that will be needed. Practically, it is usually impossible for a remedial instructor to be responsible for more than five 1-hour classes each day. The rest of the time is needed for adequate recordkeeping, unearthing of new materials, and coordination with the classroom teacher.

Find Facilities--On an emergency basis a remedial reading teacher can operate out of a janitor's closet or some other makeshift arrangement, but a reading specialist should be given facilities that not only make the job a pleasure for him, but also make it an effective place for him to instruct children. If the focus of the remedial program is the training of classroom teachers for corrective work in the classroom by a reading resource teacher, that resource teacher should also have an office and supply room from which he can conduct interviews with teachers and children, and where he can house appropriate materials that he will need in conducting classroom demonstrations.

There are two rather obvious ways to provide facilities for a remedial reading program. One is to remodel an existing room in the school. Some schools have taken basement rooms that were used for storage and have panelled, carpeted, and lighted them so that they become attractive places to instruct children. Other schools have taken an unused classroom or an unused portion of the gymnasium and constructed small work areas within that facility, making appropriate decorative arrangements so that it becomes a pleasant place for children and teachers. Those school systems that have made an effort to remodel and to decorate the remedial reading facilities in an attractive way have found that the students respond enthusiastically to their efforts. Students realize that they are being given a special treat when they enter a bright, carpeted, well lighted place that may be in contrast to a rather drab classroom.

Another obvious way for finding a facility for remedial reading instruction is to build a room or bring in a portable facility as a remedial reading area. Literally thousands of portable units have been constructed or brought into school yards as part of Title I remedial programs for disadvantaged children. These portable facilities range from house-trailers to prefabricated units that are quickly erected on school grounds. One of the attractive things about new construction is that the teacher, the reading coordinator, the classroom teachers, and the principal can all be involved in designing the interior to make it complement what they feel is a desirable program.

Purchase Materials--The equipment and materials for the program should grow out of the needs of the children. Effective diagnosis will determine the kinds of problems and, therefore, the kinds of equipment and materials needed to solve them.

No matter what the structure of the remedial reading program in the school, a good quantity and a wide variety is necessary. A variety of materials is needed because the children must find in the remedial reading area things that are different from what they have in their classroom. It is well known that motivation plays a key role in getting disabled readers

to respond to treatment. Materials alone will not motivate children, but they can be used to great advantage as part of motivation; and it is not likely that children will be motivated by the same kinds of materials that caused them to fail in the classroom. Another aspect of the materials should be visual stimulation, auditory stimulation, and kinetic stimulation provided by the materials that are purchased for the program.

It is not easy to locate equipment and materials or to find out how good they really are. Too many schools rely on equipment and textbook salesmen who, quite naturally, believe their products to be the most effective. Time and money should be allocated for trips by the reading specialist to schools using various kinds of equipment and materials, and to conventions and other meetings where he can talk with other reading specialists about what they find most effective. Further, continuing evaluation of the program should include evaluation of specific pieces of equipment and of games, books, and other materials.

Some schools have discovered that existing materials do not specifically meet the needs of their children. These schools have funded the preparation of their own materials, tested them in the program, and then produced them in sufficient quantities for use.

A special consideration in the purchase of materials for remedial reading is a large supply of high-interest books. Publishers recently have developed a number of series of high-interest books, especially for boys, containing a vocabulary considerably below the interest level.

Select Children—Generally there are two primary means of selecting children for a remedial reading program. The first is teacher recommendation. The classroom teacher sees the child in action and learns rather quickly those who are having difficulty with reading; and, because of her acquaintance with the child's cumulative record, she should know whether that difficulty is a reflection of the child's learning capacity or of something else. The second means of selecting children for a remedial reading program is what might be called a discrepancy criterion. Children going into a program are often given more reading achievement tests, and the grade level achieved on that test is compared with the capacity or mental age of the child. If the discrepancy, or gap, between the reading achievement and the capacity, or mental age, is significant, then the child is a candidate for the remedial reading program. And certainly the children with the largest gap or largest discrepancy between achievement and capacity are those who should receive first consideration where priorities have to be established.

In the selection of children, it is important that referrals from classroom teachers include a statement of observations as to specific disabilities, as well as a listing of the activities the classroom teacher has used in trying to up-grade the child's reading ability.

Schedule Treatment—Scheduling children into any kind of special program always creates problems, especially for the administrator. To make sure that remedial reading treatment occurs under the best conditions, the child should not be pulled out of other instructional activities that he especially enjoys. It would be desirable, of course, for him to report to the remedial reading class during the period when his classroom reading is taking place.

Treatment should be done on a frequent basis. Research indicates that remedial treatment should be given three or more times a week for the most beneficial effects. Some progress is noted in children who have treatment only twice a week, but it is especially important in the more severe cases to practice reading several times a week for as long as is necessary to achieve a level consistent with regular classroom reading activities.

Evaluate Regularly—Evaluating the reading program is complex and cannot be given simply in a few paragraphs. Some notations will benefit the reading coordinator when setting up a remedial reading program within a school. One is that at least two kinds of evaluation should take place: an evaluation of the child's progress in developing reading skills, and an evaluation of the procedures used within the program—that is, procedures of selection and treatment should receive an evaluation as well as the child's progress. This is tantamount to saying that not only the children should be evaluated, but also what the teacher is doing and using should be evaluated.

Results of the remedial program are often exaggerated, to the harm of the children and the program itself. For one thing, achievement tests are not always interpreted properly, so that claims are made for the child that do not hold up once he returns to the classroom. Also while a third-grade child in a remedial class may indeed have gone from primer to second reader, which is a remarkable feat, his classmates have progressed from the beginning of their third readers to the end, and he returns still, to his mind, the dumbest one in the class.

The reading coordinator should be skilled enough

to help the reading specialist in evaluating test results. Reading tests fall loosely into two categories: the group survey achievement test based on standardized norms, and the individual diagnostic test. Survey tests, while they might have diagnostic elements, can be more accurately thought of as being screening devices to help discover discrepancies between reading capacity and achievement. Sources on such tests are not always accurate appraisals of reading level, but are approximations of individual ability. Individual diagnostic tests, on the other hand, discover specific skill weaknesses and can be used to recommend remedial and corrective treatment. In dealing with either of these types of tests, remember that reliability and validity of many reading tests are not high. Consequently, undue emphasis should not be placed on any one score. Test interpretation is important and would make a good subject for inservice training.

The matter of the child returning to his regular reading class still far behind, despite evident progress, could be solved in two ways: one, a longer period of the remedial class than many schools allow, and two, full coordination with the classroom teacher to continue reinforcement of the child's skills.

A related matter is the tendency of some classroom teachers to teach grades rather than to aim their teaching at specific needs. The third-grader who returns to the classroom having been brought up to second-grade reading level is unable to deal with much of the third-grade material. Such material has to be presented to him in terms he can understand, or he will continue to fall behind. Coordination between the reading specialist and the classroom teacher in finding the materials for that child and working out techniques that will prove effective with him is a difficult problem. Continuing emphasis from the reading coordinator on the need to know and use appropriate materials will encourage reading teachers to match the child and the material.

All such matters relate to evaluation because the reading program can be evaluated only in terms of what it sets out to accomplish. It cannot be termed a failure in areas in which it never was intended to function. So the philosophy of the program, the results hoped for in terms of children's abilities, and the limitations of the program have to be formulated before the evaluation phase can be worked out. The same evaluation instrument should be employed for all children so that comparative effectiveness studies can be made.

Report Results—Unless the reading program—its goals, methods, techniques, results—are reported accurately and systematically, the program will be in trouble from the beginning.

First of all, the board of education must understand the needs and what can be done to meet them, or they will not approve the additions to the staff and the money for equipment and materials. And continuing reporting of results will be necessary for the continuance of the board's support.

Secondly, the parents, particularly the parents of the children in the remedial program, should be informed about reading and the problems to be solved through remedial efforts. If they are not, they may attach some stigma to the fact that their children are in the remedial program. Furthermore, it is the public that ultimately pays the bill for the program, and so the public should have an honest appraisal of the reading program and what is being done to solve reading problems.

Finally, principals should be kept fully informed of the program and fully conversant with the methods and materials being used, as well as with the results.

The responsibility for full reporting to all segments of the school staff and to the public should be part of the role of the reading coordinator. It will often be the principal who actually reports to the parents, but he must depend on the reading specialist for his information.

Common Mistakes

The following checklist of the common pitfalls of school reading programs should constantly be reviewed by those who plan and operate remedial reading programs.

Organization

- *Lack of definition of responsibility and authority for the reading specialist*
  In each situation the question "What is his role?" has to be answered.
- *Scheduling 15 to 20 students per hour into a remedial class*
  Most successful programs have no more than six students report at any given time to a remedial reading teacher. In some instances, programs put a maximum of 50 cases per week on any one remedial reading teacher.

Personnel

- *The assumption that a good classroom*

teacher will make a good reading specialist
The concerns of a reading specialist usually involve specialized and technical knowledge that can be gained from a combination of university training and experience. Usually the classroom teacher is not so prepared.

Facilities

- *Not providing adequate space or attractive quarters*
  A remedial reading facility usually requires space for a minimum of 100 books, several pieces of equipment, a file cabinet, and miscellaneous supplies.

Materials

- *Allowing little or no money for materials*
  It is estimated that $2,500 to $3,000 is needed to adequately supply one remedial reading teacher.

Selection

- *Making selection only on basis of a score on standardized group reading test*
- *Making selection on the difference between the reading level and the grade placement*
  Selection of remedial cases should be concerned with the gap between performance and capacity.

Time

- *Providing once-a-week sessions of 60 minutes or more*
  Successful programs have found that it is necessary to meet with remedial cases two or more times a week for any noticeable improvement over a semester.
- *Terminating instruction at the end of such arbitrary time periods as, for example, 6 weeks*
  Remedial instruction should be carried on until the student's progress indicates that he can profit from regular classroom instruction.

Assessment

- *Determining progress by the score on a standardized group test*
  Ordinarily the standardized group test does not measure the skills that are taught in a remedial reading class.

Inservice Programs

Although the teaching of reading is centuries old, the approaches needed in today's schools are still in the testing stages. Little formal instruction or practical work is offered for secondary teachers. Any school that has tried to find a reading coordinator or other reading specialists knows how scarce they are.

Faced with new approaches and uninformed teachers and administrators, the schools are turning to inservice training for developing needed personnel. The most effective programs allocate time during the school day for such training and do not rely on the good nature of the teacher to attend late afternoon or evening sessions. This necessitates the hiring of substitute teachers to man the classrooms during the inservice sessions.

The content of an inservice program for remedial reading teachers should include sessions on the diagnostic process and what to look for in diagnosis, tests available for diagnosis, the establishment of performance objectives for disabled readers, materials and equipment for teaching disabled readers, evaluating a child's progress in specific reading skills, recordkeeping, and reporting the progress of the disabled reader.

The content and extent of the inservice programs depend on the knowledge of the staff and the type of reading program being formulated. In some cases, developmental reading has to be the starting point, with effective reading teachers demonstrating techniques and materials. In most cases, the theories and practicalities of diagnostic testing are a part of inservice courses. All teachers can benefit from seeing new equipment and materials and learning how they work with different disabilities.

Even some of the effective remedial programs suffer from a lack of inservice education. When it is left to chance, it is usually left out, and this mistake undoubtedly cuts down on the effectiveness of the program.

One of the important byproducts of inservice training in reading is the opportunity it affords for coordination among the various staff members working on the problem. Inservice discussions offer a chance for the remedial instructors to explain what they are doing, and to show how their instruction can be reinforced by the classroom teacher. By the same token, classroom teachers have an opportunity to discuss the developmental program and to explain why some of the goals of the remedial program may not be compatible with the classroom program as it is

now operating. Often, the results of such interaction is a revamping of both the developmental and remedial programs so that they become a truly coordinated effort.

Only when everyone involved in the education of children with reading disabilities is fully aware of the problems and what is being done about them can they assume their proper roles in the ultimate elimination of those problems.

DIAGNOSTIC AND CORRECTIONAL PROCEDURES FOR SPECIFIC READING SKILLS

Classroom teachers and remedial reading teachers often want to know how to identify a special reading skill and how to correct it when a child shows a weakness in the skill. In this section sample exercises for specific skills are described. These exercises can be used either to assess a child's performance or to give him practice in a weakness that has been diagnosed.

These exercises should not be considered the only or even the best answer to a given skill deficiency. They are, however, samples of types of exercises that have worked for other teachers. This section may be useful as a quick reference for small group activity or as a guide to developing corrective exercises for individuals who exhibit specific reading skill deficiencies.

Sample exercises are given for specific skills under the following headings:

Perceptual Reading Skills
- Auditory
- Visual
- Motor

Word Identification Skills
- Sight Word
- Structual Analysis
- Context Clues
- Syllabication

Comprehension Skills
- Words
- Sentences
- Main Ideas
- Generalizations

Rate of Comprehension

Oral Reading Skills

Beside each sample exercise will be one of three terms to indicate the way it will most likely be used—*worksheet: activity, individual.*

Worksheet: Designates diagnostic or correctional procedures which generally are found in worksheets and can be used by a group the size of a normal class.

Activity: Involves procedures that generally include discussion or similar activity from a smaller group.

Individual: Specializes in diagnostic and correctional procedures designed for an individual.

Taxonomy of Reading Skills

PERCEPTUAL READING SKILLS

Auditory

1. Matching rhyming words
2. Identifying consonant sounds
   a. Initial position
   b. Final position
   c. Consonant blends
   d. Consonant digraphs
3. Identifying vowel sounds
4. Hearing word variants
5. Recognizing syllable length
6. Listening for accent

Visual

1. Noticing likenesses and differences

2. Noticing differences in upper and lower case and between letters
3. Increasing eye-span
4. Developing spacial discrimination
   a. Up and down
   b. Toward and from
   c. Betweenness
   d. Nearness
   e. Horizontal sequence
   f. On and under
   g. Top and bottom

Motor

1. Developing left-right eye movement
2. Developing hand-eye coordination
3. Developing motor awareness and coordination
4. Focusing

Sample Exercises for Perceptual Reading Skills—Auditory

Matching Rhyming Words

1. On the left side of the page, display pictures of objects which exemplify the sound being taught; on the right side, display pictures of rhyming words. The children are to draw a line to the rhyming object. — Worksheet
2. In small groups, one child says a short word, the next child says a rhyming word, and so on until all possibilities seem exhausted. — Activity
   Variation: Use nonsense words or syllables.
3. The teacher makes up nonsense couplets. The child should supply the rhyming word in the second line. — Individual
   Example: Teacher—He was very fat.
   He wore a funny_____.
   Child—Hat.

Identifying Consonant Sounds (Initial)

1. On the left side of the page, display pictures of objects which exemplify the initial sounds being studied. On the remainder of the page the children are to draw objects which begin with the same sound as the key object. — Worksheet
2. On the left side of the page display pictures of objects which exemplify the initial sound being taught. The children are to look at the object on the left, think of its name, find another object on the right side that begins with the same sound, and draw a line to it. — Worksheet
   Variation: Expand or cut the number of choices according to the needs of group.
3. Each child receives a worksheet with a playground scene on it. Many objects are displayed in the picture; most of the objects start with initial consonant sounds already studied. With a red pencil, all the objects beginning with_____are marked. With a blue pencil, all the objects beginning with_____are marked. Only two or — Worksheet

three sounds should be tested at once. The picture can be used again to test other sounds.

4. The teacher reads sentences with words that begin with the initial sounds being taught. The children raise their hands when they hear the initial sound.

Activity

Identifying Consonant Sounds (Final)

1. Pictures of objects on this worksheet are alike initially but vary their consonants in the final position. The teacher calls the name of an object and the children mark or circle it. Example: coat-comb, man-mat, bag-bat.

Worksheet

2. From three choices, the child must cross out the picture or word that ends in a different sound than that of the key word.
   Example: hat—man—cat—fat.

Individual

Identifying Consonant Sounds (Blends)

1. The children are to arrange the various blends being taught in alphabetical order along the left side of the page. From a mixed list of words starting with these blends, the children are to put the words next to the blends with which they begin.

Worksheet

Variation: Use this exercise for blends in the final position, and digraphs also.

2. Divide the class into small groups. Each group has chalkboard space and a baseball diamond drawn in that space. The bases are lettered with blends that are being taught. The child who can write a word beginning or ending in the corresponding blend at each base gets a home run.

Activity

Identifying Consonant Sounds (Digraphs)

1. Divide the class into small groups. Each group has chalkboard space and a baseball diamond drawn in that space. The bases are lettered with digraphs that are being taught. The child who can write a word beginning or ending in the corresponding digraph at each base gets a home run.

Activity

2. In this diagnostic test, there are four choices for each exercise. The choices are to be either blends or digraphs. The child is to choose the correct initial sound or digraph that is represented in the verbal stimulus given by the teacher.
   Example: Teacher—Number 1, shoe—shimmer
   Child—Looks in row 1 and marks the digraph *sh.*

Individual

3. To check mastery of one digraph, the child is to circle the pair of words that end in the digraph_____, or that begin with the digraph_____.

Individual

Identifying Vowel Sounds

1. From a list of words the children are to put all the words governed by one rule into the same column or box.
   short *e* long *i* r-controlled *a*
2. The children are to return to their readers to skim for words that fit into the categories given by the teacher. The categories for sorting are determined by the vowel sounds the teacher wants to stress.
   Example: the long sound of_____
   the short sound of_____
   the r-controlled sound of_____
3. Lead the children in a discussion about two columns of words. All of the primary vowel sounds in the words of one column are long and are in open syllables. All of the primary vowel sounds in the words of the other column are short and are in closed syllables. Lead them to see the relationship between long sound-open syllables and short sound-closed syllables.

Worksheet

Hearing Word Variants

1. Show a picture of one object and then a picture of many identical objects (one object and its plural). The children are to mark whichever picture the teacher calls.
   Example: Teacher—Boys
   Children—Mark the group of boys.
   Teacher—Cat.
   Children—Mark the picture of one cat.

Worksheet

Recognizing Syllable Length

1. Give a list of mixed words containing one-, two-, and three-syllable words. The children are to unscramble the words and put them into three columns according to the number of syllables per word. Then they are to label the columns one-, two-, and three-syllable words.
2. To make the child aware of syllables, have him touch his hand lightly to his jaw and say a two-syllable word slowly. The number of times his jaw must drop to say the word is usually the number of syllables in that word.

Worksheet
Variation: Adjust the syllable length and list of words to fit the class, group, or individual.

Individual

Listening for Accent

1. Give a list of two-syllable words. The children are to divide them into syllables. Next, they are to circle the stressed syllables.
2. The children are to use a dictionary to look up a list of words whose meanings change when their accents change. Next they are to correctly use both words in sentences and mark the words with their proper accent for that context.

Example: ex press' ex pert' per fect'
ex'press ex'pert per'fect

Sample Exercises for Perceptual Reading Skills—Visual

Noticing Likenesses and Differences

1. The children are to discriminate between sets of objects whose likeness or difference depends on discrimination of number. Example: three large circles containing differing numbers of smaller circles.	Worksheet
2. On a worksheet with pairs of frequently confused words, as the teacher reads sentences the children are to underline the correct word from the pair. Example: quiet-quite, deep-dear, palace-place, throat-throne.	Worksheet
3. The child is to sort according to size, color, shape, and/or type of object. If materials are hard to obtain, have him sort his classmates by color of hair, color of shirt or blouse, color of shoes, etc.	Individual

Noticing differences in upper and lower case and in letters

1. Difference in upper and lower case: From a worksheet containing a mixture of upper and lower case letters, the teacher names the letter and the children mark or circle the letter named. Example: Teacher—Capital *A*. Children—Mark the upper case *A*. Teacher—Small *a*. Children—Mark the lower case *a*.	Worksheet
2. Differences in letters: Using upper case letters, display a letter on the left side of the page and some modifications of it on the right side of the page. The children are to choose the similar form of the letter.	Worksheet
3. The children are to use pipe cleaners for reconstruction of letter forms whether they be in upper or lower case. Beads or buttons may also be used if coordination is developed enough.	Activity

Increasing eye-span

1. Use a single column from a newspaper or magazine. Mark two vertical lines through the column. The student is to practice reading the material up to each vertical line in one fixation.	Activity

Developing spacial discrimination (Up and Down)

1. On a worksheet with pairs of objects in up and down positions in each exercise, the teacher asks the children to mark the_____that is up, the_____that is down. Example: Good objects for teaching up and down are pairs of kites, butterflies, jumping boys, hats, birds, kittens, balls, and airplanes.	Worksheet

2. The children are to bend up and down, climb up and down on small stairs, and reach up and down. — Activity

Developing spacial discrimination (Toward and From)

1. On a worksheet, present three objects, two of which are facing the same direction. The children are to choose the one that is facing away from the other two. — Worksheet
2. On the left side of the page have trees and on the right side of the page have houses. The trees stand for the country and the houses stand for home. Down the middle of the page are pairs of characters, each facing either the trees or the houses. These sets of characters can be cats, dogs, boys, girls, mothers, fathers, etc. The teacher asks the children to mark which man of the two is going home, which dog is going home, which little boy is running away to the country. — Worksheet

Developing spacial discrimination (Betweenness)

1. The teacher demonstrates betweenness with objects situated in this position: block, block, doll; block, doll, block. With colored markers or blocks the children then practice making situations where there is betweenness. — Activity
2. On a worksheet situate drawings or pictures in this fashion: block, block, doll; block, doll, block. The children are to decide and mark which set the doll is between and so on in the worksheet with other objects. — Worksheet

Developing spacial discrimination (Nearness)

1. From a series of four objects, the middle two being alike, the outer two being different, the children are to decide which object of the two middle objects is near one of the unlike outside objects. — Worksheet
   Example: Show pictures of four objects per frame.
   Teacher—Which girl is near the cat?
   Children—Mark the picture of the girl near the cat, not the dog.

Developing spacial discrimination (Horizontal sequence)

1. Display three objects in front of the children and demonstrate the naming of the first, next, and last object. Using any three objects, have them locate the first, next, and last objects from left to right. — Activity
2. On a worksheet, have exercises containing pictures of three objects. The teacher designates which object the child is to circle—first, next, or last. — Individual

Developing spacial discrimination (On and Under)

1. Present a worksheet with small objects drawn on or — Worksheet

under tables, chairs, dressers, ladders, beds, or stairs. The teacher asks the students to mark the object on the dresser, under the ladder, and so on through the worksheet.

Developing spacial discrimination (Top and Bottom)

1. On a worksheet, in vertical columns have pictures of objects in sets of two. The children are to mark the top or bottom of the set as the teacher calls for it.
   Example: Teacher—The cat on top.
   Children—Marks the cat in the top frame. — Worksheet
2. With vertical lines as guidelines, the children are to paste paper, beads, or macaroni from the top of the page to the bottom. — Activity

Sample Exercises for Perceptual Reading Skills—Motor

Developing Left-Right Eye Movement

1. With a colored margin on the left side of the paper to designate where to start the activity, the children are to draw a circle in a given square or put an *X* in a given rectangle. For older children, have them draw a horizontal line through groups of vertical lines, never extending outside these vertical lines. — Worksheet
   Variation: Have them complete any sequence where they must begin at the left and finish at the right.
2. With their heads straight and still, the children should focus on an object at a distance of five feet away from them. This object should be moved by the teacher from her right to her left, or from their left to their right. All board work or any paper activity should be constructed to enhance a left to right movement. — Activity

Developing Hand-Eye Coordination

1. Everyday activities which increase visual-motor coordition and that are easy to incorporate into classroom plans are—buttoning and unbuttoning, lacing and tying, opening and closing snaps, zipping and unzipping, using simple tools, carrying objects, and pouring liquids. — Activity
2. Some developmental activities which will enhance visual-motor coordination are the following: cutting, painting, pasting, tracing, finger games, coloring, model making, bead stringing, and block building. — Activity

Developing Motor Awareness and Coordination

1. Balancing helps entire body coordination. Have the children stand on tip-toe using both feet for 10 seconds, then each foot for 10 seconds. Next, while balancing on one foot, they are to swing the other foot. Then while standing on one foot they are to make a circle on the floor with the other foot. Last, while on tiptoe, they are — Activity

to lean forward with their heels off the ground. After leaning over as far as possible, they are to return to original position.

2. Games involving the imagination which enhance bodily awareness are—cart pulling, loading, pushing, pushing with back, pulling sideways, lightening a load, pretending to be parts of a storm—high wind, heavy and gentle rain, thunder, and lightning. Acting like kangaroos, rabbits, elephants, birds, airplanes, and trains will also enhance bodily coordination. — Activity
3. Locomotor activities which help in the development of coordination are skipping, galloping, small hops, walking sideways, waddling, and marching. — Activity

Focusing

1. The younger students are to identify objects by color, size, shape, and texture. They are to sort according to the above criteria. As skill of sorting increases so must the degree of detail in focusing. — Activity
2. From an assortment of buttons, beads, or similar small objects, the children are to find a square button, etc. This object should not be too different in color or texture, so that they must find it not by touch, but by focusing on shape detail. — Activity
3. In small groups, the children are to move their heads from side to side, up and down, and in a rolling motion, while focusing on a stationary object. — Activity

WORD IDENTIFICATION SKILLS

Sight Word

1. Developing sight vocabulary

Structural Analysis

1. Recognizing affixes
2. Recognizing compound words
3. Recognizing roots
4. Recognizing contractions

Context Clues

1. Using definition clues
2. Using experience clues
3. Using comparison clues
4. Using synonym clues
5. Using familiar expression clues
6. Using summary clues
7. Using reflection of mood clues

Syllabication

1. Using syllabication generalizations

Sample Exercises for Word Identification Skills–Sight Word

Developing Sight Vocabulary

1. Given a worksheet, the children are to underline the words that are pronounced by the teacher. These words are new words for that grade level but have already been presented in discussion and possibly in a reading selection.	Worksheet
2. This game is played like "Bingo." Words are written in columns and rows. The children cover the words pronounced by the teacher. The first child to completely cover a column or row is the winner.	Activity
3. The child is to keep a notebook of some words that represent his errors in word recognition. Each word is recorded in the top left corner of the page. Next some word representing the same phonetic element is written. On the remainder of the page, the original trouble word is written in meaningful sentences.	Activity

Sample Exercises for Word Identification Skills–Structural Analysis

Recognizing Affixes

1. After reviewing rules about adding a certain suffix to verbs, list the verbs. The children are to alter the form depending on what suffix they are studying, then use the altered verb in a sentence.	Worksheet
2. After reviewing rules about adding the comparative and superlative form to adjectives, the children are to use all three forms of designated adjectives in different sentences.	Worksheet

Recognizing Compound Words

1. The children are to make as many sensible compound words as possible using a given word as the first part of their compound word. Example: Given–snow Composed–snowman, snowfall, snowdrift	Worksheet
2. Present the children with a list of hyphenated compound words. They are to use the words in sentences. If they are advanced enough, discuss how the hyphenated words are used (mostly as adjectives). Discuss why they are used (for easier reading and understanding).	Activity
3. The child is to divide the compound word into its original words. He is to then tell the meaning of the original words and the meaning of the compound word.	Individual

Recognizing Roots

1. Using lists of common prefixes, suffixes, and roots the children are to use the prefix and root list, or the suffix	Worksheet

and root list, to make sensible words. They are then to define the new word by its use in a sentence.

2. Next to a list of given words, the child is to write the root word; from a list of rules, he is to letter the root word according to the rule governing it. Individual
   Example: flying fly rule b

Recognizing Contractions

1. Given a group of word pairs, the children are to shorten the two words to make them into a contraction. From a group of sentences containing contractions, the children are to recreate the original words used to form the contractions. Worksheet
2. This card game is prepared and played like Old Maid. Shuffle and deal the 3 X 5 cards to each player. The card pairs are mated as to original words and their contractions, but one contraction does not have a mate. As the player draws a card from the person on his left, he tries to match the drawn card with those in his hand. As he finds a pair he lays them down, and the first one to go out is the winner. As the pairs are laid down, they must be read. The person left holding the unmated card must first tell what the contraction stands for. He is the dealer for the next game. Activity

Sample Exercises for Word Identification Skills—Context Clues

Using Context Clues

1. The children are to match pictures to sentences that describe the action of the picture, or that apply to its meaning. Worksheet
2. Riddles are good exercises for the development of using context clues, especially definition, comparison, and summary clues. Worksheet
3. Present a short story of one paragraph with some words left out. The children are to read each sentence and complete it with their own words, or those from a given list. Different types of context clues may be exhibited in each sentence. Worksheet
4. To show how context can be a check against confusing similarly written words, present a worksheet where similar words may be chosen to complete the sentence. Individual
   Example: The metals / medals are polished to a bright shine.
5. To test a child on his use of context clues, use words to complete a given sentence. These words should begin alike and be of the same part of speech to further enhance his discrimination. Different sentences can exhibit different kinds of context clues. Individual
   Example: Given—A strong wind and icy snow make a_____.

Choices—blizzard
blanket

Sample Exercises for Word Identification Skills—Syllabication

Using Syllabication Generalizations

1. In working with each rule, the children are to divide sample words, then discuss why they divided the words as they did. Present the rule in a concise definition and give more words to be divided. At the end of the exercise, have them restate the rule in their own words.
2. After several syllabication generalizations have been studied or reviewed, present a list of words for the child to divide and have them letter the divided word with the correct rule governing its division.
   Example: supply sup ply rule e

Worksheet
Variation: For the more advanced, have them restate the rule and think of sample words that exhibit this rule.
Individual

COMPREHENSION SKILLS

1. Matching words and pictures
2. Recognizing meaningful phonograms
3. Matching definitions and word symbols
4. Recognizing antonyms, synonyms, and homonyms
5. Seeing literal and interpretive meanings
6. Recognizing meaning in larger units—sentence, passage, chapter
7. Recognizing main idea and supporting detail
8. Recognizing sequence
9. Following directions

Sample Exercises for Comprehension

Matching Words and Pictures

1. The children are to label, with preprinted cards, the various objects in the room.
   Example: Prepare cards for a table, chair, picture, pencil, chalkboard.

Activity

2. Present a series of pictures and a series of corresponding words on index cards. The children are to match the pictures with the words. After they finish matching their set of words and pictures they trade sets with their neighbors.

Activity

Recognizing Meaningful Phonograms

1. Present a list of phonograms for each vowel. The children are to see how many sensible words they can make each phonogram a part of.
   Example: vowel *a*
   ail . . . pail
   ash . . . sash

Worksheet

ake . . . cake
ank . . . tank
ang . . . pang
at . . . pat

2. Given two lists of rhyming words, the children are to match the rhyming pairs. Then, in the first list, they are to underline the rhyming phonogram. — Worksheet
3. The teacher reads and presents a copy of a poem to the class. The children are to underline the rhyming words. Then they are to isolate the phonogram that rhymes. — Worksheet

Matching Definitions and Word Symbols

1. Prepare a worksheet where the children must match the word and its definition. The choice of words and definitions depends on the grade level of the group. — Worksheet
2. Prepare two lists of words which the children must match. The matched pair must be related in meaning. — Worksheet
   Example: Shone . . . bright
   sunny . . . cloudy
   dollars . . . cents
3. Prepare a worksheet where the child reads an exercise and crosses out the word that does not apply or is not related in meaning to the other words. — Worksheet
   Example: blizzard snow drifts supper

Recognizing Antonyms, Synonyms, and Homonyms

1. Given two words which are either opposite or similar in meaning, the children are to mark the pair with "O" or "S" respectively. — Worksheet
   Example: ocean S sea
   sunny O cloudy
2. The children are to skim a previously read story for words given by the teacher. After they read the given word in context, they record it and write a word which means its opposite. Then they write both words in a sentence. — Worksheet
3. The children are to complete sentences with the correct homonyms. Emphasize their reading the entire sentence first to get meaning from context which will aid in the selection of the correct word. — Worksheet
   Example: A large fish leaped out of the_____. (sea, see)

Seeing Literal and Interpretive Meanings

1. Prepare questions to be presented before the students read. The questions should elicit responses emphasizing literal comprehension. — Activity
   Examples: "List the main characters." "Write_____." "Write a sentence telling_____." "Copy the sentence showing_____." "Complete the fol-

3

lowing_____." "What four words describe_____?" "Categorize the activities of _____." Also useful are completion exercises based on specific sentences in the reading.

2. Prepare questions to be presented before the students read. These questions should provoke thought while reading. Some sample questions which enhance interpretation are: "What did he mean by_____?" "Do you think that this should have happened?" "What makes this a good example of_____(some literary style)?" "Compare these two characters." "Which character displayed the most courage?" — Worksheet

Recognizing Meaning in Larger Units

1. Using index cards with nouns, verbs, adjectives, and adverbs written on them, demonstrate to the children how to construct a sentence. Start with a noun and a verb and add length to the sentence by using adjectives and adverbs to answer the basic questions of who, what, when, why, where. These questions may be stressed in sentences as well as paragraphs. — Activity
2. Present the children with questions that set a purpose for reading. Discussion of these questions should include topics such as colorful words, character differences, and plot sequence. This gives organization and purpose to their reading. Always try to emphasize the technique of survey, question, read, recite, and review in every reading for every subject. — Activity

Recognizing Main Idea and Supporting Detail

1. After reading the passage at the top of a worksheet, the children are to underline the key words (subject and verb) of each sentence. Next they are to write a title for the passage. Last they are to skim the passage again for the main ideas and list them at the bottom of the page. — Worksheet
2. After the children have read the story the teacher writes sentences on the board that show main ideas and detail from the reading. Through discussion the children distinguish which are the main ideas and which are the supporting detail. Finally, on a sheet of paper each child arranges the main ideas into their proper sequence. — Worksheet
3. In a class discussion, the children are to identify the quote by the speaker or situation, and tell the significance of the quote to the story. The teacher should pick those quotes which are indicative of a main theme, or which elicit a discussion of plot or character. — Worksheet

Recognizing Sequence

1. Using a group of sentences describing a task which is sequential, the children are to put the sentences in the order that the steps must be done. — Worksheet

2. After reading a selection, the children are to rearrange the main ideas into their proper sequence. These main ideas can be discussed and decided upon by the class or be given by the teacher. — Worksheet

Following Directions

1. After writing daily activities and plans on the board, and after reading them once to the children, the children are now responsibile for completing their assignments as requested for their group on their board. — Individual
2. The children are to read silently, then aloud, the directions for every assignment. Then the children are to discuss what fulfilling this assignment means. They are then responsible for following these written directions. — Individual
3. Present a worksheet on which directions vary according to topics that were studied in each subject for the past week. The list of directions is to be completed but done in fun. Some ideas for directions are as follows: — Worksheet

   - Write the page number that tells where ants get their food. (Science)
   - Trace a picture of an ant. (Science)
   - Copy the definition of a verb. (English)
   - Give an example of a verb used in a sentence. (English)
   - From your notebook, copy three new words learned this week in Spanish.
   - Draw a Pilgrim boy or girl. (Social Studies)
   - State three reasons why we still observe Thanksgiving. (Social Studies)
   - Spell correctly three words that you missed on the pretest. (Spelling)

COMPREHENSION RATE

1. Using little or no regression
2. Using little or no vocalizing or subvocalizing
3. Using correct phrasing to read
4. Adjusting rate to purpose

Sample Exercises for Comprehension Rate

Using Little or No Regression

1. Depending on the grade level of the child, take a story from a basal reader and retype it in meaningful phrases per line. The child is to read each line of the retyped version with a timing. He is then to read the original — Individual

story with a timing on that reading too. To make him aware of the difference in comprehension rate, compare and discuss his timings on the reading.

2. Using a cover card, the child is to move from left to right across a page such as the following. As he reads, he uses the cover card to block out what has been read. After the reader has become skillful in reading pages such as the following, substitute the letters with single words, then phrases. — Individual

   Example:

x	c	b	m	y
o	w			
out	go	come	see	

Using Little or No Vocalizing or Subvocalizing

1. A remedy for vocalizing is to have the child try to chew gum while he reads. The chewing will do two things: make him aware that he is vocalizing while reading and prevent him from vocalizing. — Individual
2. A remedy for subvocalizing is to put a pencil in the child's mouth, between his lips. The tongue must not touch the lips as the child reads so he learns to read without subvocalizing. — Individual

Using Correct Phrasing to Read

1. Demonstrate to the children how to be "sentence aware" and how to learn to rapidly recognize prepositional phrases, introductory clauses, and so on. Working with partners, the children are to use teacher-made flashcards with common prepositional phrases, introductory clauses, and frequent phrases. — Activity
2. Present a worksheet for practice in rapidly recognizing prepositional phrases. The children read the first line, then swish through alternatives that complete the sentence. One or more possible completions may be used if they make sense. — Worksheet

   Example: Given—The batter hit the ball . . .

   Choices—on a branch
   into left field
   with a man
   into the stands
   up the chimney
   between the houses
   on the sky
   over the moon

Adusting Rate to Purpose

1. After silent reading, give the children a list of questions the answers to which are found in their reading. They are to skim to find the answers to the given questions. — Activity

2. Questions involving material found in the index, table of contents, and chapter headings make good situations for scanning for answers. — Worksheet

ORAL READING SKILLS

1. Using sufficient eye-voice phrasing to read
2. Using pleasing pitch and volume
3. Enunciating correctly
4. Using punctuation correctly

Sample Exercises For Oral Reading Skills

Using Sufficient Eye-Voice Phrasing To Read

1. If the student is reading faster than he is pronouncing the words, then he must slow down, learn to read in phrases, and pronounce those phrases before he goes on to read the next phrase. "Reading is like talking" should help him in slowing down to a normal rate. — Activity

Using Pleasing Pitch and Volume

1. Oral reading preceded by silent reading (always!) allows the child to feel out the passage and to decide how to read it with feeling. Emphasizing that "reading is like talking" should also help expressionism. Passages with much dialog lend practice to a student in varying his pitch and volume.

Enunciating Correctly

1. Bring attention to endings like *ing, d,* and *t*. Some practice words that could be used for individual help in the form of flashcards or for class help in the form of choral presentation are: — Activity

chattering	brought	quiet
coming	feed	slid
fishing	dived	caught
talking	crept	carried
stirring	spent	tonight
falling	listened	right
blowing	chattered	around
making	watched	tugged
growling	rattled	that
pushing	waited	pulled

Using Punctuation Correctly

1. Give practice in oral reading where each sentence or each phrase extends only one line. After several practices with this, extend the sentence to the next line but leave many spaces between sentences. Reduce these — Worksheet

spaces as the child grows more proficient at using punctuation.

2. Discuss the purpose of punctuation and what the various punctuation marks mean. Lead the child to see that meaning changes as punctuation changes. Give a worksheet where the child must supply the punctuation marks to sentences.

   Examples: Where did you see our cat
   No, it can't be
   The boy reads well

Worksheet

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